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China Report

AGRICULTURE

No. 156



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5 August 1981

CHINA REPORT

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I. GENERAL INFORMATION

CENTRAL COMMITTEE DIRECTIVE ON SYSTEM OF RESPONSIBILITY PROBLEMS ISSUED

Beijing BANYUETAN [SEMI-MONTHLY TALKS] in Chinese No 8, 25 Apr 81 pp 4-10

[Article: "Central Committee of the Chinese Communist Party On the Printing and Issuance of a Circular on Several Problems in Further Strengthening and Perfecting a System of Responsibility for Agricultural Production"]

[Text] All provincial, municipal, and autonomous region CCP committees; all military regions, provincial military districts, and field army CCP committees; all party organizations in central government ministries and commissions, and in departments and commissions of state organizations; all general headquarters of the Military Commission of the Central Committee; all CCP committees of branches of military services; and all party organizations in people's organizations:

The forum of provincial and municipal first secretaries recently convened by the Central Committee discussed problems in the strengthening and perfecting of the system of responsibility for agricultural production, and prepared written minutes of discussion. The various views in these minutes that were agreed upon by the Central Committee are now being issued to you in the expectation of their prompt organization for transmittal and discussion to clarify thinking, to unify perception, and to be linked to concrete local situation for implementation, so as to be helpful in mobilizing cadres and the masses in far flung rural villages to do a good job in the development of agricultural production.

Central Committee of the Chinese Communist Party
2 September 1980

Several Problems in the Further Strengthening and Perfecting of the System of Responsibility for Agricultural Production

(Minutes of the 14-22 September 1980 Forum of First Secretaries in Provinces, Municipalities, and Regions)

1. Since the 11th Plenary Session of the Third Party Central Committee, every jurisdiction in the country has eradicated the influence of the ultraleftist line and implemented the two documents on agriculture of the Central Committee. With regard to prices, taxes, credit, and procurement of agricultural byproducts, agricultural policies have been adjusted, and restrictions on private plots, household sideline occupations, and country fair trade have been suitably liberalized.

In particular, there has been respect for the self-determination of production teams, development of diversification through adaptation of general methods to local situations, general establishment of various forms of a system of responsibility for production, reforms in methods for calculation of remuneration to labor, and preliminary correction of subjectivism in guiding production and egalitarianism when making distributions. These measures have effectively fired the enthusiasm of the peasants and have caused a fairly rapid revival and development of agricultural production; income of the overwhelming majority of peasants has increased, and the situation in rural villages has become increasingly better.

Our future tasks are still to continue to forge ahead resolutely following the line, the programs, and the policies of the party's third plenary session, to study new situations, to solve new problems, and to strive for an all-around upsurge in agricultural production and gradual prosperity in the lives of the peasants. In this way the modernization of agriculture will be realized.

2. The collective economy is the unshakeable foundation for progress in the modernization of China's agriculture. It possesses a superiority that an individual economy cannot match. This has been attested to by the history of development of agriculture during the past 20 years. Following the liberation of the country while leading the broad masses of peasants our party has instituted two great social reforms of far-reaching significance. The first was eradication of the feudal system and the institution of land reform. The second was movement from this foundation to the institutions of socialist reform of the small scale peasant economy, guiding several hundred million peasants to take the road of collectivization. This laid a new foundation for the alliance of workers and peasants, emancipated rural production forces, and led the peasants into a new stage of the socialist construction of agriculture.

Though the collectivization of China's agriculture went through some twists and turns and made some mistakes, generally speaking, the achievements are the main feature. The twists and turns and mistakes of which we speak were largely in the process of guiding the collectivization of agriculture. For one thing, there was failure to consistently act strictly in accordance with the principles of voluntary participation and mutual benefit; the places that resorted to coercion and administrative methods were numerous, while those that used the methods of demonstration and inducement were few. For another thing, there was failure to consistently adapt general methods to local circumstances, to give tailored guidance, and to carry out correct programs in an orderly and gradual way. There were mistaken actions of requiring arbitrary uniformity and doing everything the same way. These problems already appeared in some places during the stage of building advanced agricultural producers' cooperatives; during the movement to organize people's communes, these problems developed to a greater degree and on a larger scale, resulting in a nationwide tendency to affect the transition to communism prematurely "proneness to boasting and exaggeration," and a "tendency toward blind guidance," which occasioned substantial losses. In view of these circumstances, the CCP Central Committee and Comrade Mao Zedong conducted several readjustments of the rural people's commune system and policies, which gradually stabilized the collective economy. Now, after more than 20 years of efforts, the rural collective economy has been consolidated in most places, and the thrust of agricultural

collectivization is understood and supported by the broad masses of peasants. From the foundation of the collectivization of agriculture, agricultural productivity has risen substantially, and initial improvements have taken place in the conditions of agricultural production. At the present time, the irrigated area nationwide stands at 700 million mu; there are more than 600,000 large and medium size tractors; the total power of various kinds of farm machines is 180 million horsepower; commune and brigade public property is worth more than 60 billion yuan; and total output value of commune and brigade enterprises accounts for one-third the total output value of agriculture. Primarily through reliance on the collective economy, agricultural production has steadily risen, total output value of agriculture has increased by more than 200 percent that of the early period of cooperativization; the livelihood of the peasants has improved; and socialist industrialization and development of various other endeavors have gained needed assurance. Under conditions in China, one cannot imagine building a modernized agriculture based on a small peasant economy of single families or households nor the realization of fairly high labor productivity and commodity rates which would enable rural villages to fundamentally divest themselves of poverty and attain common prosperity. Therefore, without the slightest doubt whatsoever, the direction of agricultural collectivization is the correct one, and must be adhered to.

Of course, we must also realize that as a result of shortcomings in the collectivization movement, deriving from the disturbances of the ultraleftist line, and as a result of the failure over a long period of time to shift the emphasis of party work to economic construction, the present material and technological foundation of the collective economy is still comparatively weak. Problems requiring reform and perfection also exist in the people's commune system and structure; administrative and management work constitutes an even more conspicuous weak link. In the area of carrying out the principle of distribution according to work performed, and the building and perfecting the systems of responsibility for production, there have been no major improvements or breakthroughs for a long period of time. This has restrained the enthusiasm of the peasants for socialism, and the superiority of collectivism has not been able to be fully demonstrated. Because the collective economy has not been well run in a small number of backward and poverty stricken places, even people's faith in the collectivization of agriculture has been shaken. We must face these problems squarely and actively resolve them gradually. At present it is necessary to treat improvements in administration and management, institution and distribution in accordance with work performed, and the strengthening and perfecting of the system of responsibility for production as further consolidation of the collective economy, and as key links in the development of agricultural production, making arduous efforts and giving strict attention to them.

3. Under the inspiration of the spirit of the Third Plenary Session of the 11th Party Central Committee, for the past 2 years cadres and the masses of commune members everywhere have proceeded from realities, have emancipated their minds, boldly probed problems, and have established various forms of a system of responsibility for production, which may be generally divided into two categories: The first category is contracting for small segments of work, with remuneration being calculated on the basis of fixed quotas. The other category is contracting

for work tasks or contracting for output, with remuneration being calculated on the basis of output. These have realized results, led to multiple increases in output, and have also led to some new experiences. In particular, the system of responsibility of specialized contracting with remuneration being calculated on the basis of output has been especially welcomed by commune members. This is a very good beginning. Leaders at all echelons should summarize both positive and negative experiences together with the broad masses, help communes and brigades further improve and perfect the system of responsibility for production, and greatly advance management work in the collective economy.

4. China is a vast land with a backward economy, the development of which is very unbalanced. In addition, agricultural production differs from industrial production with hand operations being generally dominant, labor diffuse, the production cycle fairly long, and many aspects controlled by natural conditions. This requires that production relationships be suited to levels of productivity in different places, and requires greater adaptability and more flexibility in the management of agricultural production. In different places, different communes and production brigades, and even the same production teams, must proceed from real requirements and circumstances, permitting diversified forms, diverse organization of labor, and diverse methods of calculating remuneration to exist simultaneously. As levels of productivity rise, these methods and forms will see commensurate changes in development at different times. Therefore, anything that is helpful in encouraging producers to be concerned with collective production to the maximum extent, or forms of a system of responsibility that are helpful in increasing production, increasing earnings, or increasing commodities, that are good and workable, should be supported. There can be no rigid adherence to forms or efforts at arbitrary uniformity.

5. The system of responsibility of specialized contracting with remuneration being calculated on the basis of production entails a cooperative division of labor, making the most of agricultural labor force, and contracting out parts of the farmland on the basis of capabilities under conditions of unified administration by production teams; make the most of workforces in forestry, animal husbandry, sideline industries, fisheries, industries, and commerce by contracting out parts of work in each of these industries on the basis of capabilities; and contract for production in each industry on the basis of the principle of what is best for production and what is advantageous for operations, by contracting to teams, individual workers, or households. For each of the various operations involved in the production process, production teams will handle as a totality whatever should be handled as a totality, and divide up whatever should be divided up. Portions contracted for production will be compensated with uniform distribution with rewards or penalties being given for overfulfillment or underfulfillment of production respectively. The form of contract decided upon will remain in force for the current year or for several years.

Such systems of responsibility for production are superior in many ways to comparable forms of contracting for production. They can satisfy commune member demands for linking production to calculation of remuneration, stabilize the dominant economic position of production teams, and unify in concrete ways the

advantages of arousing the enthusiasm of individual commune members for production and developing a uniform administration, and cooperative division of labor. These systems for production responsibility are helpful in developing diversification, and helpful in the spread of scientific farming and promoting the production of commodity goods; they are helpful in having people perform to the full extent of their abilities, materials being used to the full extent of their usefulness, and the land being used to the full extent of its capabilities. They are useful in turning commune members' attention to household sideline occupations, and in making suitable arrangements for the production and the livelihoods of households with the four types of dependents or households with few able-bodied laborers. Such forms are both suitable for use in existing poverty stricken areas, and can develop, as productivity increases and as the kinds of things produced increase, into higher stages of responsibility systems with specialized divisions of labor that are more socialized in character.

Some other production teams engaged in agriculture have proceeded from the former placement of responsibility on individuals in field management to the calculation of rewards and penalties on the basis of quantity of production. This also possesses some of the superior characteristics of a system of responsibility wherein remuneration is calculated on the basis of production in accordance with specialized contracts. It is also a system with which cadres and the masses are relatively familiar and happy to accept.

In some communes and brigades in Heilongjiang, Zhejiang, and the northeast, as well as in the suburbs of large cities, where diversification is comparatively well developed and the levels of mechanization are fairly high, some have also broken through the production team sphere to make production brigades the unit for instituting systems of responsibility in which calculation of remuneration is based on production in accordance with specialized contracts. This is a new development.

All jurisdictions should provide guidance on the basis of the desires of the masses in a gradual spread, through adaptation of general methods to specific circumstances, of the various aforesaid forms. In addition, they should help perfect the various systems, and solve the problems that can crop up in the course of development.

6. At the present time, among cadres and the masses in some provinces and regions, the issue of whether or not to contract production with households (including contracting for specific work with households) has aroused widespread discussion. For the sake of work and for the sake of production, formulation of relevant policies is imperative.

In most places in China, the collective economy has been consolidated or comparatively consolidated. In some places, nevertheless, mostly because of leftist policies or because of other leadership reasons, the collective economy has not been well run; the level of productivity remains very low; and the livelihood of the masses is extremely hard. In view of this situation, different programs of contracting for production with households should be adopted on the basis of differences in areas and differences in communes and brigades.

In production teams in remote border and mountain regions, and in backward and poverty stricken areas, which have long "relied on resold grain for their food grain, loans for production, and subsidies for livelihood," the masses have lost confidence in the collective, and have consequently sought contracting for production with individual households. The demands of the masses should be supported. Contracting for production with households can be done as can contracting for specific work with households, and such contracting can be continued for a fairly long period of time. Looked at in terms of the actual circumstances existing in these areas, institution of a system of contracting for production with individual households is a necessary measure for linking the masses to the development of production in order to solve their problems of food and clothing. In national terms, given the situation of the absolute superiority of socialist industry, socialist commerce, and collective agriculture, institution under the leadership of production teams of a system of contracting for production with households is dependent on the socialist economy and cannot depart from the socialist road; there is no danger of capitalism being restored; thus it is by no means frightening.

In most areas where the collective economy is fairly stable and production developing, and where the masses are satisfied with existing systems of responsibility for production; or where improvements would make the masses satisfied, there is no need to contract for production with individual households. The main energy of leaders in these places should be put on how further to consolidate and develop the collective economy. Where contracting with households for production has already been put into effect, unless the masses want a change, the system should be permitted to continue in effect. Later, depending on how the situation develops and what the masses want, action should be guided adroitly according to circumstances, and various transitional forms used for further organization.

How the different aforementioned areas should be delineated should be diligently studied by each province, municipality, and autonomous region, and decided on the basis of the situation in local communes and brigades.

With regard to communes and brigades where contracting for production is done with households, the following several characteristics should be achieved as a result of work, and discussion with the masses: (1) Maintain collective property; do not divide up everything. Rapidly determine forest rights and prohibit reckless cutting of forest wood. (2) Reiterate that land may not be bought or sold; work may not be hired, and high interest rates may not be charged. (3) Dependents of the military and of martyrs, the households enjoying the five guarantees, [childless and infirm old persons who are guaranteed food, clothing, medical care, housing and burial expenses] and other hardship households shall be satisfactorily cared for. (4) Those former collective economy production methods that the masses welcome should be retained to the maximum extent possible. (5) Production teams and commune members must strictly carry out the various obligations of individual endeavors; debts and creditor rights must be sorted out and put in order. (6) The production team organization must be maintained, and the nuclear role of the grass-roots party organization must be strengthened.

7. Every effort should be made to do a good job in those communes and brigades where economic levels and management levels are in an intermediate state. The

number of communes and brigades in this category is very great, amounting to slightly more than 50 percent of the total. They have numerous internally unstable factors, and are easily influenced by outside forces. Only by strengthening work in this category of communes and brigades can the overall situation be stabilized.

There are various reasons why some areas have been poverty stricken for a long time and why some communes and brigades have not been well run. The use of contracting production to households will not, of itself, solve all the problems. In some, the readjustment of policies in many ways or a lightening of responsibilities to enliven diversification is needed. In some, gradual improvement of the conditions of production and improvement in transportation and communications are needed. In some, readjustment of the scope of the communes and brigades is required with a streamlining of structures and a reshaping of leadership groups. In some, suitable enlargement of private plots and the proportion of individual commune member aid to the economy is necessary. In short, it is necessary to treat the illness with specific medicines to solve the problems.

8. It is necessary to make full use of all kinds of handicrafters, and the skills of those versed in small business or as peddlars and in all trades and industries. A small number who want to undertake individual operations may, following approval by relevant units and after signing contracts with their production teams, be certified to leave their production teams to work and carry on business. Commune members should continue to be encouraged to develop sideline occupations in order to enliven the rural economy and cause it to flourish.

9. In carrying out any policy and in launching any activity in rural villages, the party must look after the economic interests of the peasants and respect the democratic rights of the peasants. In the work of establishing and perfecting production responsibility systems, to contravene the desires of the masses in any given place, to coerce the spread of a certain form, and to proscribe other forms, is wrong. Maintenance of the party's leadership and respect for the rights of self-determination of communes and brigades must be part of a single total; there must be both a carrying forward of democracy and adeptness in guidance. Expansion of the right to self-determination of communes and brigades must be combined with strengthening of democratic management by commune members and taking full advantage of commune member congresses and the function of management commissions at all levels. All major matters affecting the welfare of commune members, including establishment of systems of responsibility for production, must undergo democratic discussion, and be decided upon by the collective.

10. Leadership by the party must be intensified, and leaders' work styles improved. Comrades throughout the party should understand that reform of the small scale producer's mentality and habits is a long-term and arduous task requiring an entire generation or even several generation's time that will be completed only through a large amount of thoroughgoing and meticulous ideological and political work, and solid economic work. All resorts to coercion and commandism are ineffective and damaging. One must be adept at using persuasion and education, classical demonstrations and economic guidance to steadily raise the peasants' socialist consciousness and to link up closely with the peasants.

11. Diligent training of cadres must be done to train a body of talent that understands the party's policies, the government's laws, and is well versed in the administration and management of the socialist collective economy. Cadres at all levels engaged in agricultural work, particularly county and commune cadres, should immerse themselves in the study of their profession, constantly practice, and make themselves into experts in the management of the socialist collective economy with all possible speed.

12. During this winter and next spring, all provinces, municipalities, and autonomous regions must treat as major tasks the establishment and perfection of production responsibility systems and do a good job in calculating remuneration for labor, handling these tasks together with winter production and production disaster relief work in disaster areas. Each province may carry out the aforementioned principles and programs in accordance with the realities of local situations. The main requirement is achievement of an overall stable situation, development of a fine situation, and winning of a bumper harvest in agriculture during 1981.

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'JINGJI YANJIU' DISCUSSES AGRICULTURAL COLLECTIVIZATION

HK190811 Beijing JINGJI YANJIU [ECONOMIC RESEARCH] in Chinese No 6, 20 Jun 81
pp 44-50

[Article by Wang Songpei and Zhu Tiezhen [3796 2646 7198 2612 6993 5271]: "On the Brilliant Road of Agricultural Collectivization in China"]

[Text] Nearly 30 years have elapsed since the CCP led the tens of millions of peasants to take the road of socialist agricultural collectivization. In the past 30 years, China's agricultural collective economy has grown up step by step out of nothing, and from elementary to advanced for and has manifested its superiority and vitality with each passing day. It is of positive and practical significance for realizing the modernization of our agriculture to review the road we have traversed, correctly analyze and draw historical experience and lessons, and be firmer in our orientation of collectivization.

1. To Lead the Chinese Peasants To Take the Road of Agricultural Collectivization Is a Historical Inevitability

Under the condition of very backward productive forces, whether or not to guide the peasants to take step by step the road of socialist collectivization was an important issue of both theory and practice our party faced after the liberation of the whole country. In the past, there were differing opinions on this issue, and even today when the cooperative transformation of agriculture has already been completed, there are still some people who raise questions of this kind again. Therefore, it is very necessary to gain a clear idea of this problem in the integration of theory and practice.

For the proletariat and its party to lead the liberated peasants to head for socialism through the road of cooperative transformation of agriculture is a fundamental principle of Marxism-Leninism. In 1894, in his "The Problems of the French and German Peasants," Engels pointed out: "After seizing state power, ...our task concerning small farmers is first of all to change private production and private ownership into the cooperative production and ownership, but we should do it by setting an example and providing social aids for this purpose instead of resorting to violence." ("Selected Works of Marx and Engels" Vol 4, p 310) After the October Revolution, Lenin answered the question of whether in the situation in which Russia was encircled and its economy and

culture relatively backward, a single state of the Soviet Union could build socialism. Lenin held that the key to whether or not socialism could be built lay in whether or not we could unite with and guide the peasants to take the socialist road. In his "On the Cooperative System" and other works, he explicitly pointed out that under the dictatorship of the proletariat, the cooperatives were the best forms for changing the scattered and individual small-scale peasant economy of thousands upon thousands of small farmers into the collective economy, and the only way for the proletariat to transform the individual small-scale production in agriculture. Lenin said: "So long as state power is already in the hands of the proletariat, the political power of the exploiting classes has been overthrown and all means of production ... have already been in the hands of the working class," "the development of the cooperatives means ... the development of socialism," "with the conditions of a complete cooperative movement, we can stand firm on the foundation of socialism." ("Selected Works of Lenin," Vol 4, p 687)

According to Marxist-Leninist fundamental principles, and suiting reality in China, our party and Comrade Mao Zedong guided the vast small-scale peasant economy to take the road of cooperative transformation of agriculture, realize the socialist transformation of individual agriculture and build the socialist collectively-owned economy in agriculture. This is a great practice.

On the eve of nationwide victory in the democratic revolution, the second plenary session of the Seventh Party Central Committee explicitly instituted the principles and policies for the socialist transformation of agriculture through the cooperative movement. The decision of the session stressed: "It is possible and necessary to guide the scattered individual agricultural economy and handicraft economy which constitute 90 percent of the total value of the national economy in a prudent, step-by-step and active way to move to modernization and collectivization. The viewpoint of letting things run their course is wrong." After the completion of land reform, the party Central Committee put forward in good time the task of turning the democratic revolution into socialist revolution in the countryside, and spared no time in taking advantage of the situation to carry out the movement for agricultural mutual aid and cooperation. In 1953, the socialist transformation of agriculture was stipulated as a basic task of the party's general line in the transition period. In December of the same year, the party Central Committee formally worked out the "decision on developing agricultural producers' cooperatives" stipulating the concrete ways and policies for the individual working peasants to be integrated in production step by step. In 1955, in his "On the Problems of the Cooperative Transformation of Agriculture," Comrade Mao Zedong further expounded the necessity and possibility of realizing the cooperative transformation of agriculture, resolved the important problems such as the forms and steps for forming cooperatives and the class line in the cooperative movement. The movement for the cooperative transformation of agriculture developed swiftly throughout the country. By 1956, the transformation had been completed in the main.

Some people once raised the question whether with the low level of agricultural productive forces in China and with no large quantity of agricultural machinery and equipment in use, the realization of the cooperative transformation of

agriculture was in conformity with the law that the relations of production must suit the nature of productive forces. In our opinion, the answer must be in the affirmative.

First of all, China's cooperative transformation of agriculture was the need of the development of our social productive forces. After the founding of new China, it took 3 years or so to complete the land reform, abolish feudal land ownership, institute land ownership by the peasants and liberate the agricultural productive forces fettered by the feudal relations of exploitation in the rural areas throughout the country one after another. Three hundred million poverty-stricken peasants of our country were provided gratis with 700 million mu of cultivated land, rid of the exorbitant land rents and exploitation through usury, and exempted from the burden of about 700 billion jin of grain which used to be handed annually to the landlords, thus arousing the peasants' enthusiasm for developing production within the individual economy. For a certain period, the relations of production of individual ownership of this kind helped promote to a certain degree the development of agricultural production. However, the limitation of the small-scale peasant economy and the contradiction between the small-scale peasant economy and socialized industrial mass production in particular revealed themselves very soon. As regards the backwardness of small-scale peasant economy, Marx pointed out: "The ownership of small-scale land in its character excludes the development of labor productive forces, the social form of labor, the social accumulation of capital, the large-scale animal husbandry and the ever-increasing application of science." (Marx' "Das Kapital," Vol 3, p 913) The situation of the small-scale peasant economy in our country was exactly so. Its scale of production was narrow and limited, its operations were scattered and labor productivity was low. Such being the case, it could in no way adopt agricultural machinery and advanced technology and resist natural disasters. Hence, the growth of output was limited. It could not satisfy the ever-growing needs for farm produce by the development of industry and the national economy as a whole, and could not improve the well-being of the peasants at a fairly fast speed. The contradiction between the small-scale peasant economy and China's socialist industrialization became sharper with each passing day.

On the eve of the liberation, although its output value constituted about 10 percent of total national output value, China's modern industry was extremely concentrated. This showed that modern productive forces with industry using large machinery as their symbol had developed to a certain extent. After liberation, through 3 years' time of recovery, industrial production surpassed the highest level before the liberation. The annual output of steel rose from 158,000 tons in 1949 to 1,349,000 tons and that of raw coal went up from 32.43 million tons to 66.49 million tons. Total output value of modern industry increased from 7.91 billion yuan to 22.05 billion yuan. On the one hand, this industrial recovery and development improved our social productive forces, thus providing the cooperative transformation of agriculture with material conditions; and on the other hand, the development of socialist mass industry objectively demanded that the development of socialized mass agriculture should adapt itself to the former. Agriculture is the foundation of the development of the national economy. The development of socialist industrialization requires agriculture

to provide it with increasing commercial grain and industrial raw materials, accumulation funds for production, and an ever-expanding market. However, this task cannot be fulfilled by the small-scale peasant economy. Viewing things from the law that the relations of production must suit the nature of productive forces, the development of our productive forces demanded that the small-scale peasant economy should be transformed into socialist mass agriculture. Comrade Mao Zedong pointed out: "Socialist industrialization cannot be carried out in an isolated way in the absence of the cooperative transformation of agriculture." ("Selected Works of Mao Zedong," Vol 5, p 181)

Secondly, letting the small-scale peasant economy which was very unstable develop freely would lead to polarization. No long after the land reform, there emerged polarization in China's countryside. According to a 1952 investigation of Xin County in Shanxi Province, after 1949, 8,253 peasant households sold 39,912 mu of their land and 5,162 houses. These households accounted for 19.5 percent of the county's total. Usury was very active. According to the investigation of 16 Xiang in Hubei, Hunan, Zhejiang and Guangdong provinces, in 1953, the number of creditor households accounted for 10 percent of the total number of households, a more than 100 percent increase over 1952. New rich peasants had emerged in the rural areas all over the country. The 1953 investigation materials on some typical villages in the three northwestern provinces showed that among the 2,054 peasant households, there had emerged 16 households of new rich peasants, constituting 0.78 percent of the total number of peasant households.

This situation indicated the necessity of promptly leading the peasants to take the road of socialist collectivization. If socialism does not occupy the rural front, capitalism is bound to occupy it. As a result, most of the peasants will become impoverished again, lose their land and be reduced to objects of exploitation again. China's people's democratic dictatorship and the establishment of the socialist publicly owned economy provided the peasants with political and economic conditions for them to avoid polarization and move to common prosperity, as Comrade Mao Zedong pointed out: "Only by uniting themselves to stride forward on the socialist road, can the majority of the peasants throughout the country rid themselves of poverty, improve their living standards and resist natural calamities." ("Selected Works of Mao Zedong" Vol 5, p 176) The vast numbers of peasants educated in Marxism for a long time and tempered in the revolution, the poor and lower-middle peasants in particular who comprised 60-70 percent of the rural population, had strong enthusiasm for taking the socialist road and bringing about common prosperity. They resolutely chose socialism for which there was every political and economic requisite in China. This is the important reason why our party could successfully lead the peasants to achieve the cooperative transformation of agriculture in a situation in which the agricultural productive forces were backward.

Compared with the small-scale peasant economy, the socialist collective economy has remarkable superiority. This finds expressions in a concentrated way in the rapid development of agricultural production and better improvement of the

living standards of the commune members. In 1955, there were 634,000 agricultural producer's cooperatives throughout the country which practiced the autumn harvest distribution. Compared with the average output per unit of agricultural products of the individual working peasants, the agricultural producers' cooperatives' output of paddy increased by 10.2 percent; wheat, by 7.4 percent; soybeans, by 19 percent and cotton, by 25.9 percent. Other industrial crops increased in general. On the basis of increased agricultural production, the income of the commune members improved generally. From 1953 to 1957, the national income of the peasants increased by 30 percent. The average income of the cooperative households was much more than that of the individual peasant households.

The practice of our cooperative transformation of agriculture proves that the party's prompt guidance of the peasants to take the road of socialist collectivization after the completion of land reform tallied with objective laws and was entirely correct.

2. The Cause of China's Agricultural Collectivization Advanced in Twists and Turns

Guiding the several hundred million Chinese peasants to take the road of socialist collectivization is a grand but arduous task. There were inevitably twists and turns in its advance. In the course of the development of the cooperative transformation of agriculture, we had both successful experiences and setbacks and lessons, which we should seriously sum up and absorb.

Concerning the movement for the cooperative transformation of agriculture, the party and Comrade Mao Zedong from the very start stipulated the policies of providing positive leadership and insuring steady advance, stressed the importance of acting upon the principles of voluntary participation and mutual benefit and opposed any issue of arbitrary orders by coercion, pointing out that only on the basis of mutual benefit could there be voluntariness. Taking the characteristics of the individual working peasants as small private owners, to avoid making them feel taken by surprise voluntarily give up private ownership, according to the needs of the development of production and the degree of their consciousness, we upheld the principles of voluntary participation, setting models and mutual aid and benefit, and adopted the three consistent and step-by-step forms and measures, as from the mutual aid team, the elementary agricultural producers' cooperative to the advanced agricultural producers' cooperative in guiding step by step the peasants to move from ownership by the individual to ownership by the collective. This is China's successful experience in realizing the cooperative transformation of agriculture and also an important reason for the smooth advance of our socialist agricultural transformation. In the course of Soviet agricultural collectivization, owing to the long-standing unsettled problem of the basic forms of the collective economy, by 1931 when the collective economy upsurged, there emerged a confused situation in which large numbers of animals were slaughtered and the productive forces damaged, resulting in a reduction in agricultural production for years. Grain output decreased from 4.47 billion poods in 1928 to 4.24 billion in 1931. But in the course of our cooperative transformation of agriculture, grain output increased. In 1956, our country suffered floods bigger than that

in 1954 (the flooded areas were 240 million mu, 70 million mu more than in 1954), but the grain output totaled 365 billion jin, 44.1 billion jin more than in 1954, or 16.5 billion more than in 1955, a year of bumper harvest, or 56.2 billion jin more than in 1952, when the cooperative movement was not carried out.

But on the other hand, we must see that the development of the agricultural collectively owned economy underwent twists and turns, and we gained profound lessons in this respect. Some expressions of them were:

First, although we once analyzed the complexity and protracted nature of transforming the small-scale peasant economy in theory, we still had an insufficient understanding of it ideologically. We were impatient for success in action, and the pace of the cooperative transformation of agriculture in the later stage was too abrupt and hasty. There occurred impatience and rash advances in some places, and the relative stability of ownership in a certain period was neglected. In 1954 there were only 2 percent of the peasant households throughout the country who joined the elementary agricultural producers' cooperatives. In 1955 they increased to 14.2 percent, and by 1956 they exceeded 96 percent, of whom 88.8 percent joined the advanced agricultural producers' cooperatives. Particularly after the nationwide completion of the cooperative transformation of agriculture, "with tremendous victories, we have begun to be imprudent." We were mentally confused by imprudence, and committed "leftist" mistakes in guiding economic work. The most prominent manifestation was that we moved by force the newly formed advanced agricultural producers' cooperatives, which demanded urgent rectification and consolidation, to the ownership of the means of production by the people's communes, and in some places "countywide communes" were even set up, practicing a countywide unified distribution, and in fact, collective ownership was abolished. The then universal "winds of communism," "winds of exaggeration" and "winds of issuing ignorant orders" greatly dampened the enthusiasm of the peasants, resulting in the 3-year drastic reduction in agricultural production from 1959 to 1961. During the 10 chaotic years, Lin Biao and the "gang of four" intensified their efforts to practice ultraleftism on a larger scale, trumpet the so-called "transition in poverty," "cut the capitalist tail" and abolished the private plots for personal use and household sideline occupations, thus creating greater confusion and seriously sabotaging the agricultural productive forces and the socialist collective economy with the production teams as the basic accounting unit.

Second, we did not proceed from the national condition in which productive forces were multi-level, and did not establish the corresponding diversified forms of collective ownership in accordance with the principle of adapting measures to occasions and local conditions. In cognition, we divorced ourselves from the actual level of the development of productive forces, stressed "the bigger the collective unit and the higher the level of public ownership, the better," and one-sidedly believed that the larger the scale and the higher the level of public ownership, the more its superiority would be manifest. In doing the work, we very often simplified matters and "found a single solution for diverse problems." With the variation of the level of productive forces, the natural and geographical conditions (such as mountainous areas and plains) and economic regions (such as agricultural region, forestry region, animal husbandry region and fishery region), the specific forms of ownership should have varied, but instead we indulged in practicing a single model to be applied by the whole country.

Third, after the cooperative transformation of agriculture, no particular efforts were made to vigorously develop the agricultural productive forces and establish a solid material basis for the collective economy. As for the business management and development of production of the collective economy, we lacked a careful study and long-term planning. We spent much time and energy on so-called "relentlessly criticizing capitalism." With the result that the more we criticized, the lower the enthusiasm of the commune members and grassroots cadres for grasping production became and the more we criticized, the greater the damage the productive forces suffered, and naturally the more unstable the collective economy became. In the meantime, we attached no importance to correctly handling the relations of material interests between the collective and the individual. Disrupted by "leftist" ideology, we negated the principle "to each according to his work" and practiced so-called "political workpoints" and sharing food from the same big pot, thus seriously hampering the development of productive forces. The socialist agricultural collective economy cannot be consolidated, if it is not laid on the basis of the corresponding modern productive forces.

Apart from the sabotage plotted by Lin Biao and the "gang of four," the fundamental reasons for the above-mentioned problems, to put it in a nutshell, were that we ignored objective economic laws, and one-sidedly stressed the role of subjective will and the role of changing the system of ownership and the relations of production. But as a result, things ran counter to our desire. Practice has proved that the relations of production surpassing the level of the development of productive forces hampered and even damaged the development of productive forces. Therefore, in any circumstances, we should respect and practically act on objective economic laws, and in doing reforms in the system of ownership, we must adopt a prudent policy and do it accurately, not subjectively.

Essentially speaking, most of the mistakes mentioned above were committed by good people with good intentions, hence there was more haste but less speed. Subjectively we were full of enthusiasm and sincerity to practice socialism, but in reality we committed mistakes and did not do the work well. On the contrary, Lin Biao and the "gang of four" practiced feudalism and fascist dictatorship by flaunting the banner of socialism. These two practices are two different things, which brook no confusion. It must be acknowledged that the party's guiding ideology for the cooperative transformation of agriculture was based on the theory of scientific socialism, and its line, principles and policies largely tallied with Marxist principles. However, we carried out the cooperative movement in a big country with tens of millions of peasants, and in the complicated advance of the movement, it was unavoidable to make mistakes of one kind or another. It is necessary to analyze them in a practical way. At the same time, we must see to it that the party can correct its own mistakes. It was the party and Comrade Mao Zedong who found out earliest and corrected the mistakes committed in 1958, such as the "winds of communism" and "winds of exaggeration." Because of a lack of deep understanding of the mistakes and other reasons, the problems were not resolved in a satisfactory way. But, in terms of guiding ideology, at that time we opposed "egalitarianism and indiscriminate requisition," and the practices of not discussing exchange at equal value and not implementing the principle of "to each according to his work." These thoughts tallied with scientific socialism. In September 1962 the party Central Committee decided that the production team

should be taken as the basic accounting unit and the rural people's communes should practice the system of three-level ownership with the production team as the basis, and further corrected the mistakes made in 1958 of the relations of production exceeding the level of the development of productive forces. In terms of the scale of ownership, taking the production team as the basic accounting unit was a move back to a status largely equal to the elementary agricultural producers' cooperative (they are different in ownership) owing to the readjusted relations of production that already suited the level of productive forces. After 1963, the rural situation rapidly turned for the better, and agricultural production continued to advance. Some people argued that the shortcomings and mistakes in leading the peasants to realize the cooperative transformation of agriculture were the manifestations of agricultural socialism in the party's guiding ideology. This does not conform with reality and is thus quite wrong.

The historical facts fully prove that armed with Marxism-Leninism-Mao Zedong Thought, the great CCP can unite the whole party, surmount the erroneous tendencies of various kinds and lead the vast numbers of our peasants to stride forward triumphantly on the road of collectivization.

3. Practicing the Responsibility System Linking Remuneration to Output Is an Important Measure To Consolidate and Develop the Agricultural Collective Economy

Since the 3d Plenary Session of the 11th Party Central Committee, on the basis of summing up experiences, both positive and negative, in our agricultural collectivization, the rural economic policies have been relaxed, and various forms of responsibility system in production linking remuneration to output have been introduced according to the principle of suiting measures to the local conditions. The rural relations of production, which have more closely suited the present level of the agricultural productive forces, have promoted the growth speed of agricultural production, and helped improve the living standards of the peasants at a faster speed; thus in the countryside as a whole there has emerged a vigorous situation seldom seen over the past 20 years.

However, at present, there are differing opinions on the responsibility system linking remuneration to output in agriculture. Some people hold that the implementation of the responsibility system linking remuneration to output is "a retrogression," and the introduction of the system of fixing farm output quotas on the household basis is "a retreat from collective to individual economy," and some even think that China's agriculture must take the road "from the collective economy to the individual one and then to the collective one." We think that this argument is incorrect. Its root cause lies in misunderstanding of the nature, origin and role of the responsibility system linking remuneration to output.

The implementation of the responsibility system linking remuneration to output is a major readjustment of China's agricultural relations of production and a major measure in the management of the rural people's communes. Its intensive implementation helped forcefully correct the "leftist" mistakes that had already existed for a long time in agricultural management, and gave play to the enthusiasm of the masses of tens of millions of the Chinese peasants for production.

The responsibility system in production is a product of the collective and cooperated labor. In the early 1950's, in the regulations and instructions for agricultural producers' cooperatives, the party and government repeatedly pointed out that the responsibility system in production should be introduced and perfected in the agricultural collective economy. Various localities adopted some forms of responsibility systems in production, which were suited to their peculiarities and needs, including the responsibility system linking remuneration to output. As a result, good economic results were achieved in general.

For a certain period of time, due to disruption caused by the "leftist" mistakes, the necessity of rationally organizing labor in the agricultural collective economy was negated, the principle "to each according to his work" was also refuted, and the responsibility system in agricultural production was abolished. This gave rise to problems in two fields which existed for a long time in the management system of China's agricultural collective economy. They were: first, the organization of labor was in an "unplanned" state of "going to work in procession and working on the job like a swarm of bees." Second, in payment for labor, the practices of "absolute egalitarianism" and "sharing food from the same big pot" were exercised and the principle "to each according to his work" was abolished. This seriously affected the enthusiasm of the vast numbers of commune members for production.

At present, the responsibility system in production linking remuneration to output is universally welcome in our rural areas, particularly in the areas where the collective economy was not run well due to the serious disruption caused by the "leftist" mistakes in the past. Suiting local conditions, they adopted different forms of responsibility systems in production and achieved marked results in increasing production. This negated politically the "leftist" mistakes which had disrupted the agricultural business management for a long time. The implementation of the responsibility system linking remuneration to output with its task being definite and responsibility specific put an end to the "unplanned" state in which there were no persons taking responsibility in organizing labor in the rural areas. Along with this, agriculture has its own characteristics: it is not easy to check the quality of farmwork, and whether or not the labor of the laborers is effective and the degree of its efficiency can be manifested in the end products. The implementation of the responsibility system linking remuneration to output can closely integrate agricultural output with the vital interests of the commune members, and change the egalitarian practice of sharing "food from the same big pot." Compared with the responsibility system not linking remuneration to output, the former can more accurately implement the principle "to each according to his work." All this has greatly enhanced the enthusiasm of the vast numbers of commune members for production and become a powerful force to promote production at rapid speed. It can be seen that the responsibility system in production linking remuneration to output is a measure for reforming the management of the agricultural collective economy. Its positive role is manifest in upholding the collective economy, so it is certainly not so-called retrogression in the issue of ownership.

The implementation of the responsibility system linking remuneration to output is conducive to the consolidation of the agricultural collective economy, and a measure for giving full scope to the superiority of the collective economy instead of negating it. This is because in the relations of production of the whole of

socialist agriculture, ownership does not exist in an isolated way but together with the organizational management and distribution, it forms a closely indispensable entity. The establishment of public ownership of the means of production in China's socialist agriculture has undoubtedly played a decisive role. But its realization and consolidation require us to take correct measures in organizational management and distribution. The implementation of the responsibility system in production linking remuneration to output promotes the realization and consolidation of collective ownership from the reaction of organizational management and distribution on the ownership of the means of production.

Meanwhile, we must see to it that the establishment of the socialist agricultural collective economy only provides us with the objective possibility to give full play to the superiority of this economic system. To turn this possibility into reality also requires us to do a lot of work and to take various correct policies and measures. The history of the development of China's socialist agriculture in the past 30 years has proved that bringing the superiority of the socialist agricultural collective economy into full play is always related to the mobilization of the enthusiasm of tens upon millions of peasants. Whenever we adopt correct policies and measures, and spark the enthusiasm of the vast numbers of peasants for socialism, the superiority of our agricultural collective economy can be brought into fuller play; and whenever it is disrupted by "leftist" mistakes, and the enthusiasm of the broad masses of the peasants for socialism is dampened, the superiority of our agricultural collective economy cannot be brought into fuller play, resulting in slow progress or even standstill in agricultural production. The laborers are the fundamental factor in productive forces. Especially in our present situation in which agriculture is run mainly by men and animals as well as manual tools, the decisive tools of the laborers in productive forces has become more conspicuous. Eight hundred million peasants are the masters of the collective economy, and also the principal force to develop agricultural production. Their important position in our agricultural productive forces and the relations of production determine the significance of the mobilization of the enthusiasm of the broad masses of the peasants. The implementation of the responsibility system linking remuneration to output fires by policies and measures the enthusiasm of the vast numbers of peasants for socialism and gives fuller play to the superiority of the socialist collective economy.

In terms of practical life, in carrying out the responsibility system linking remuneration to output, the peasants have created many and varied forms: the system of organizing people into groups to fulfill certain tasks and the system of fixing output quotas on the basis of groups with extra pay for above-quota output, which are obviously a form of responsibility system in production of the socialist agricultural collective economy.

The system of fixing farm output quotas on the household basis and the retrogression to the practice of land being parceled out to peasant households for individual farming are different in principle. The latter concerns the fundamental change of the nature of ownership of the means of production, while the former is a different way of management of the collective economy, adopted to suit local conditions. At present, we are used to calling assigning the

"fixed targets for output, workdays and costs, with a part of the extra output as reward" to each peasant household and "the system of peasant households assuming full responsibility for most of the farm work" a "system of fixing farm output quotas on the household basis." The "system of fixed targets for output, workdays and costs, with a part of extra output as reward" was practiced as a form of the responsibility system in production linking remuneration to output (mainly fixing output quotas for each group) in some rural areas of our country early in the period of the cooperative transformation of agriculture. Later, it was developed into assigning "the fixed targets for output, workdays and costs, with a part of the extra output as reward" to each peasant household. It adheres to the collective ownership by the production team, unified management and unified distribution. It will exist for a long time not only today but also in future in the modernization of China's agriculture, as a form of responsibility system in production of socialist agriculture, and play its proper role. "The system of peasant households assuming full responsibility for most of the farm work" is currently followed in some areas, especially in areas where the production is backward and which have had difficulties in the economy. The method for this form is "to hand over the fixed amount of output originally agreed upon to the state and the collective to the full and retain whatever surplus there might be." Compared with the form of assigning "fixed targets for output, workdays and costs, with a part of the extra output as reward" to each peasant household, this form has more the characteristics of individual farming, yet it still keeps ownership of the means of production as land by the collective, and does not completely abolish unified management and unified distribution by the production team. So it is different in nature from the peasant individual economy before the cooperative transformation of agriculture. The present implementation of this form in the areas where production is backward and which have had difficulties in the economy has aroused the enthusiasm of the peasants for production and yielded good results. This proves that it has suited the local level of the development of productive forces. The proportion of this form in the rural areas throughout the country is not big, but with the development of production, there has emerged an obvious tendency to form integration in management. Therefore, it is also wrong to say that the "system of peasant households assuming responsibility for most of the farm work" has moved back to the "practice of land being parceled out to peasant household for individual farming." Over the past 2 years, according to their own characteristics, various rural areas have adopted the responsibility system in production linking remuneration to output; this has aroused the enthusiasm of the vast numbers of commune members for production, brought the superiority of the collective economy into play and promoted the rapid growth of agricultural production.

Reviewing the development of China's agriculture since the founding of the PRC, although there were twists and turns in its advance, we have taken a brilliant road. The tremendous role of agricultural collectivization in promoting the development of our agricultural production has not only been proved by the facts of the rapid development of our agricultural production in the 1950's, but will also be proved by the facts of the rapid change of the economic situation of thousands upon thousands of the people's communes, the production brigades and

the production teams whose collective economy has been run well. The vast numbers of commune members have profound feelings for our agricultural collectivization, particularly so for the once poverty-stricken peasants whose bitter sufferings in the old society remain fresh in their memories. They have never departed from the road of socialist collectivization, even when our agricultural collective economy was seriously damaged by Lin Biao and the "gang of four" and production came to a standstill or fell back. The 3d Plenary Session of the 11th Party Central Committee corrected the "leftist" mistakes that already existed for a long time and adopted a series of correct policies and measures, thus enabling our agricultural economy to get back on the track of healthy advance. This will provide the modernization program of our agriculture and the modernization program of our national economy as a whole with a reliable guarantee.

CSO: 4007/522

STATE COUNCIL TO SET UP FISH PROTECTION ZONES

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[Text] Beijing, July 4 (XINHUA)--The State Council has decided to set up two young fish protection zones in the East China and Yellow Seas, beginning from April 22, 1981. Their locations and times follow:

1. The protection zone for young greater croakers;

Location: The sea area encircled by the straight lines linking the following points.

- (1) The point at 29 degrees, North Latitude, 122 degrees 45 minutes, East Longitude;
- (2) The point at 29 degrees, North Latitude, 123 degrees 15 minutes;
- (3) The point at 27 degrees 30 minutes, North Latitude, 122 degrees, East Longitude;
- (4) The point at 27 degrees, North Latitude, 121 degrees 40 minutes, East Longitude;
- (5) The point at 27 degrees, North Latitude, 121 degrees 10 minutes, East Longitude;
- (6) The point at 27 degrees 30 minutes, North Latitude, 121 degrees 30 minutes, East Longitude, and
- (7) The point at 29 degrees, North Latitude, 122 degrees 45 minutes, East Longitude.

Time: Motor trawlers are forbidden to enter the area for production in January and February every year.

2. The protection zone for young hairtails:

Location: The sea area encircled by the straight lines linking the following points:

- (1) The point at 34 degrees, North Latitude, 121 degrees 23 minutes, East Longitude,
- (2) The point at 34 degrees, North Latitude, 121 degrees 53 minutes, East Longitude,
- (3) The point at 31 degrees 30 minutes, North Latitude, 123 degrees 27 minutes, East Longitude,
- (4) The point at 31 degrees 30 minutes, North Latitude, 122 degrees 57 minutes, East Longitude,
- (5) The point at 34 degrees, North Latitude, 121 degrees 23 minutes, East Longitude.

Time: Motor trawlers are forbidden to enter the area for production in August, September and October every year.

All units concerned must abide by the decision earnestly. It is also hoped that fishing ships of other countries and regions will give their cooperation.

CSO: 4020/226

'JINGJI GUANLI' ON REFORM OF STATE FOREST FARMS

HK220304 Beijing JINGJI GUANLI in Chinese No 5, 15 May 81 pp 18-22

[Article by Yue Xinglu [1471 5281 6922], Heilongjiang Building Forestry Bureau: "Take the Road of Diversified Undertakings in an All-Round Way with Forestry Management as the Foundation"]

[Text] Our experience in forestry economic management has shown that it is imperative to reform the forestry management system. The reform of the production structure in the state forest farms should be regarded as the core of reforming the forestry economic structure as well as the foundation for reforming the system. With premature views, this article deals with the question of how to display the advantages of state forest farms, develop diversified undertakings in a big way and utilize the forests for many purposes so, as to change the production structure which has timber production as the central task.

The state forest farms constitute an important forest base for the state. These farms abound with forestry resources, along with precious animals such as deer, minks, bears and tigers and other special products including edible fungi, mushrooms, hydnum erinaceus, ginseng and glossy ganoderma. All these are very favorable for developing diversified undertakings and multipurpose utilization. In addition, the climate and the environment in forested areas are useful in regulating climate, preserving water and soil, decreasing wind velocity and maintaining the ecological balance. These forests are also rich in barren land suitable for developing agriculture, in grasslands suitable for developing animal husbandry and in water resources. All these resources have very high use potential, and they constitute a wide range of possibilities for developing diversified undertakings and multipurpose utilization.

Over the past many years, forestry production has been characterized by timber production as the central task in a bid to onesidedly pursue the eight economic and technical goals for industrial and transportation enterprises. As a result, people have neglected afforestation, concentrated their efforts on logging trees and neglected tree nursing. Thus, because cutting volume has exceeded the growth of trees, our forestry resources have been decreasing. There is a tendency toward depletion of forestry resources in many units. Some production units have proceeded from temporary expedients and have not worked out comprehensive plans for forestry, agriculture, industry and commerce. On the contrary, they have just concentrated their efforts on increasing logging volume. Consequently they have

logged in one place after another without considering how to protect forestry resources. As these production units have carried out a single-product economy, most of the surplus wood after logging has been wasted. Take the situation of our farm for example. From 1970 when the farm was set up until 1980, as much as 1 million cubic metres of surplus wood have been wasted and from these materials we could produce 100,000 tons of fiber boards. Thus, together with the firewood for staff and workers, 20 percent of this surplus can be utilized. Most of the natural resources in forested areas have not been exploited while diversified undertakings and multipurpose utilization have only been carried out sporadically. As a result, the advantages of the resources have been undercut, and the road for forestry construction has become narrower and narrower and consequently it has been difficult to improve forested areas in a big way. Therefore, judging by the present economic situation of the state forest farms and by the long-term construction of forested areas, it is imperative to take immediate measures to change the production structure which has timber production as the key task so that we will be able to display the advantages of forestry natural resources, develop diversified undertakings and multipurpose utilization and take the road of comprehensive development of forestry, agriculture, industry and commerce.

The state forest farms represent a regional, comprehensive economy while the production structure centered on timber production is not in line with the needs of the economic development of forested areas. The only correct way for development is to change the single product structure and take the road of all-round development of diversified undertakings and multipurpose utilization. The state forest farms must take production involving afforestation as the basis for other types of production. Diversified undertakings, multipurpose utilization and timber production are interrelated and they affect each other. Therefore, the present situation of paying attention to logging trees and neglecting nursing trees must soon be changed, and it is imperative to foster the idea of regarding forestry management as the foundation. It is also necessary to increase the percentage of forest cover and promote the growth of trees. Only when forestry management has been developed will we be able to develop diversified undertakings and multipurpose utilization and supply endless resources for timber production. Our rich forestry natural resources must be fully utilized and the volume of logging must be arranged according to the growth of forests. In this way we will be able to display the advantages of the resources, develop in a big way diversified undertakings and multipurpose utilization and turn resource advantages into production advantages so as to achieve maximum economic effect. The general principle is to take forestry management as the key and comprehensively develop diversified undertakings and utilization of forests in a multipurpose way. In order to implement this principle it is necessary to reinvestigate our resources, work out plans for exploiting these resources and take measures to protect them. According to the situation of the resources, from a long-term point of view, it is necessary to work out an overall plan for mountains, water, forests, fields and roads and a long-range plan for diversifying the undertaking of agriculture, industry, forestry and commerce.

In working out a long-range plan, we must assume a scientific attitude, handle well the relationships between forestry management and diversified undertakings, multipurpose utilization and timber production and place various trades in their

proper positions so that these trades will be able to create conditions for and promote each other. For example, when living quarters and warehouses are being built in preparation for timber production, consideration must be given to the needs of logging trees as well as to afforestation. That is to say, we must at the same time consider the advantages and disadvantages of developing agriculture and fisheries and of the production of edible fungi and mushrooms. In building railways in forested areas and in building ice slides for timber, we must also consider the advantages and disadvantages of releasing and damming up water and of changing the course of and repairing roads so that investment in one trade will benefit many other trades. In developing diversified undertakings and multipurpose utilization it is necessary to uphold the principle of forestry management as the key, protect forestry resources and make full use of the surplus wood in logging areas to increase the forestry utility rate.

As the present production structure of the state forest farms does not accord with the situations of various resources in forestry areas, I hold that it is imperative to take measures to change the present production structure that is characterized by timber production as the central task. All forested areas must proceed from their specific conditions, make full use of the advantages of their resources, gradually restructure the present production structure and establish the production structure of "forestry management as the base and develop diversified undertakings and multipurpose utilization in an all-round way" so that the state forest farms will be able to comprehensively develop forestry, agriculture, industry and commerce and become prosperous forest towns. To reach this goal, the following measures must be taken:

First, persist in taking forestry management as the key, protect forestry resources, consolidate the forestry production base, speed up afforestation by planting more and better trees, increase the percentage of forest cover, rationally utilize existing forests, step up the nursing of young plants and secondary afforestation so as to produce more and better timber and improve the growth of forests. The volume of logging must be rationally defined according to the rate of growth of forests. Logging must be carried out simultaneously with afforesting and nursing, while afforestation must be combined with management so that we will be able to continuously utilize the forests. All supply, production and sales as well as staff, finances and materials must be arranged on the basis of forestry management, while consideration must be given to the diversified undertakings and developing multipurpose utilization. Consideration must also be given to intermediate and long-term interests and it is necessary to have rational locations. In this way we will be able to constantly utilize resources, develop diversified undertakings and multipurpose utilization so that our possibilities in forestry production will become broader and broader.

Second, appropriate measures must be taken to open up forestland for developing agricultural production. The agricultural production in forested areas must be carried out according to the principle of self-sufficiency. Each area must proceed from its own specific climatic and geological conditions and grow grain, beans, vegetables, fodder crops, raw materials for staple food and various industrial crops.

In order to consolidate the agricultural base, it is necessary to develop farm machinery, carry out scientific experiments in a big way and undertake scientific farming. It is imperative to consider the features of the forestland in forested areas, fully tap the potential of the existing cultivated lands and increase per unit yields so as to produce ample vegetable and grains, improve people's living standards and promote animal husbandry and a diversified economy.

Third, the localities for developing animal husbandry must be chosen well so as to quickly increase the proportion of animal husbandry in the economy. Pig breeding must be undertaken by both pig farms and households while grasslands must be utilized and reformed in a big way through raising cattle, sheep, deer and rabbits so as to gradually change the composition of people's diets.

Fourth, active measures must be taken to make multipurpose use of timber and set up industries for processing agricultural products, animal husbandry products and special native products so that state forest farms will be freed from the "colonial" position of creating surplus materials during logging. In this way, the surplus will be processed in their places of origin and the raw materials will be turned into commodities. According to the past practice, the state forest farms are "colonies" for raw materials. Thus, saddled with an enormous transportation volume and an irrational economy, these farms are assigned each year the task of transporting timber out of the forests and yet each year they fail to complete this work. Consequently, a lot of timber has been discarded in forested areas. This method does not work and it can no longer be employed. The production and processing capacity of state forest farms must be developed in a big way so that they will be able to produce and process most of the surplus materials. In this way, they will be able to display the advantages of their forestry resources and achieve the greatest economic effect.

Fifth, make full use of rivers and streams by building up dams and reservoirs to raise fish and edible frogs under the principle of low investment, quick results and substantial benefits. According to specific conditions, each forested area must utilize water or improve water resources. Therefore, measures must be taken to step up the protection of resources and water management so that water resources can be comprehensively exploited and utilized.

Sixth, develop special native products in forested areas and raise in a big way special edible products such as edible fungi and hydnum erinaceus so as not only to meet the needs of people's livelihood but also to earn enormous foreign exchange and accumulate funds for the state. Special edible forestry products in Japan have been developing quite rapidly recently. The total volume of such products in 1976 was over 230 billion Japanese yen, of which the volume of edible fungi and mushrooms was 210 billion yen or 92 percent of the total. The highest average household income in Morotsuka Village of Miyagi Prefecture came from mushroom production, followed respectively by income from timber production and rice paddy production. The Japanese experience in developing edible fungi and mushroom production is totally applicable to our state forest farms.

Seventh, following the reform in the production structure of forested areas, commercial departments must also be reformed so as to change the practice of

passiveness and transferring and transporting products in and out of the areas into the practice of linking diversified undertakings with supply, production and sales. In this way, commercial departments will be able to meet their needs in reforming the production structure of state forest farms and promote the forestry economic management system. The situation in which state shops monopolize trading must be changed so that while the state shops are being run well, collective shops may also be set up. Sales by individuals must be permitted. In this way, commerce will really display the role of exchanging commodities, combining production with consumption and promoting forestry economy.

Eighth, step up the development and building of road networks in state forest farms. Building roads in forested areas is the premise for developing diversified undertakings and multipurpose utilization. If there are no roads, it will not be possible to change the production structure which is centered on producing timber; neither will it be possible to comprehensively develop forestry, agriculture, industry and commerce. All-round planning must be done to organically link transportation for timber production with the building of roads during afforestation for extinguishing fires, with irrigation of farmland and with the building of farm roads; thus a forestry road network can be built in a planned way. Measures must be taken to gradually and comprehensively control mountains, waters, forests, farmland and roads so that forests, farmland, pastures, ditches and [word indistinct] are properly located. As a result, there will be no waterlogging on pastures, forests will grow quickly, and it will be easy to irrigate farmland. Consequently, the roads in forested areas will gradually become the nerve center for state forest farms in developing forestry, agriculture, industry and commerce.

Ninth, the management departments at various level forestry schools must resort to various forms in training technicians for carrying out diversified undertakings and multipurpose utilization of forests. The situation in which the staff of forestry management departments at various levels and state farms are not versatile must be changed to provide technical guarantees for reforming the present production structure of state forest farms.

It has been mentioned above that state forest farms have advantageous conditions and they abound with resources. Therefore, as long as they are able to change the production structure that is centered on producing timber, display their advantages and overcome shortcomings, work out plans for comprehensive exploitation, persist in forestry management as the base, develop diversified undertakings and multipurpose utilization, uphold the principle of all-round development and take the road of comprehensively developing forestry, agriculture, industry and commerce with forestry management as the base, then new forested areas that are both socialist and prosperous will emerge in the not too distant future, and we will be able to make a greater contribution to the socialist modernizations.

CSO: 4007/526

CURRENT WORK, FUTURE ROLE OF INSTITUTE OF COTTON DETAILED

Shanghai KEXUE ZHONGTIAN [SCIENTIFIC FARMING] No 4 in Chinese Apr 81 pp 22-23

[Article from Research Department, Institute of Cotton, Chinese Academy of Agricultural Sciences: "The Institute of Cotton of the Chinese Academy of Agricultural Sciences"]

[Text] The Institute of Cotton of the Chinese Academy of Agricultural Sciences is the largest cotton research center in the entire country. Founded in Beijing in 1957 on the former cotton laboratory of the Beijing North China Institute of Agriculture, it is also composed of cotton experts and professors transferred and invited from everywhere in the country. In the spring of 1958, it moved to Anyang where it was formally established.

The institute has five laboratories including those for varieties, breeding of superior varieties, culturing, plant protection, and mechanization of cotton fields, as well as an intelligence data office. It publishes two magazines, namely "MIANHUA" [COTTON] and "GUOWAI MIANHUA KEJI" [COTTON SCIENCE AND TECHNOLOGY ABROAD]. The institute has a CCP Committee Office, an administrative office, a research management department, and an experimental farm management department. Experimental farms number three, with an area of 3,700 mu. Almost 600 people are employed at the institute of whom 89 are scientists and technicians.

Since its founding, the institute has completed some major research projects and has won some major achievements, one of which was awarded a prize in the 1978 National Science Conference. Additionally, it has done much work in organizing relevant units throughout the country in undertaking cooperative research and in popularizing scientific cotton growing techniques, which have contributed to cotton research and production throughout the country. For example, in the realm of breeding of cotton varieties and superior cotton varieties, it conducted studies of cotton variety resources, mastering nearly 1,500 separate resource materials and publishing "QUANGUO MIANHUA PINZHONG ZIYUAN MULU" [CATALOG OF NATIONAL COTTON VARIETY RESOURCES] and "ZHONGGUO MIANHUA PINZHONG ZHI" [RECORD OF CHINA'S COTTON VARIETIES]. It has bred Zhongmiansuo Nos 2, 3 and 7 cotton varieties, which have been extended to cultivation over an area of several million mu.

Additionally, it has put forward a preliminary system of superior cotton variety breeding techniques suited to China. In the field of cotton culture research, the

institute has gradually ascertained the laws of growth and development of high yield cottons, and formulated an entire set of technical measures for consistently high yields of superior quality cotton at low cost, giving special emphasis to scientific use of fertilizer and water, which have played an active role in increasing scientific cotton growing standards and in promoting increased cotton output. In conjunction with other units, the institute compiled and published a book titled "Zhongguo Mianhua Zaipeixue" ["Chinese Cotton Culture"] (published in 1959 and currently being re-edited). In the realm of plant protection, the institute mastered the laws of outbreaks of the major cotton diseases and insect pests, carried out monitoring and forecasting, put forward effective control measures, and assured bumper cotton harvests. In the realm of mechanization of cotton fields, the institute has conducted much research on improvements in cotton field machines, and reform of cotton farming techniques, gradually extending them into production.

At the present time the focus of work of the entire institute is on the following: (1) Research and growing of high yield, superior quality, disease resistant, new cotton varieties with the emphasis on growing of new medium maturing upland cotton varieties and new early maturing cotton varieties suitable for continuous cropping with wheat (or rape). (2) Research on superior cotton variety breeding techniques and research on the building of bases, the establishment of stock seed production bases, improvements in the quality of delinted seeds from sulfuric acid delinting machines, and putting up research reports on technical rules of operation for stock seed production and standards for checking seed quality. (3) Further research on the collecting, preservation, and use of cotton variety resources, plus gauging of fiber quality for cotton variety resources and appraisal of their resistance to verticillium wilt. (4) Research on cotton zoning and establishment of commodity cotton bases, and publishing scientific research reports for use by the state in carrying out cotton zoning and commodity cotton base construction. (5) Continuing regional experiments with cotton varieties in the Yellow River basin in order to provide scientific data for the promotion of superior varieties. (6) Study of high yield culturing techniques for cotton and the laws governing them, emphasis going to figuring out a rational growing process and diagnostic techniques for high yield cotton, as well as techniques of chemical control, and ways to increase the solar energy utilization rates. (7) Study of cotton growing area farming systems in order to provide data for the formulation of a rotational cropping plan that combines use and nurture of the soil. (8) Research on use of cotton hybrid heteroses. (9) Launching of mechanization studies on the cotton production process, the emphasis being on study of precision sowing of cotton, techniques for producing seedlings over the entire field with one sowing and such mechanized comprehensive cultivation techniques as insect control and chemical weed eradication. (10) Research on comprehensive control of fusarium wilt, verticillium wilt, and other cotton diseases, plus launching research on biological control and chemical control of major insect pests of cotton in the cotton growing areas of the Yellow River basin. In addition, research is underway on the laws governing cotton needs for fertilizer and fertilization techniques, and culturing of cotton tissue.

In accordance with duties and requirements handed down by the Ministry of Agriculture and the Chinese Academy of Agricultural Sciences, the institute will henceforth be geared to the needs of the entire country, linking up experiences in cotton production, and intensifying basic research and applied research. In the study of cotton variety resources, in gauging cotton fiber technological properties, the laws of genetic physiology of cotton, breeding of cotton, and intelligence on farming and cotton science and technology, in particular, it will become the research center for the entire country, striving to make new contributions to China's cotton research, and to realization of the four modernizations.

BRIEFS

BUMPER WHEAT HARVEST REPORTED--Henan, Shandong, Anhui and Shaanxi reaped a bumper wheat harvest this year, surpassing their total output of last year by more than 4.6 billion jin. Henan's output totaled more than 19 billion jin, an increase of about 1 billion jin over the previous year, and second only to that of 1979. Shandong harvested 15.94 billion jin, or 500 million jin more than last year, despite the fact that its wheat area was reduced by 2.8 million mu this year. Anhui's record harvest this year was 8.4 billion jin, an increase of more than 1.1 billion jin over last year. Shaanxi's wheat production this year was about 7 billion jin, surpassing last year's by more than 2 billion jin. [Hong Kong ZHONGGUO XINWEN in Chinese 11 Jul 81 p 1]

SINO-JAPANESE STUDY PACT--Beijing, 6 Jul (KYODO)--Japan and China signed an agreement Monday to jointly study the feasibility of developing the Sanjiang Plains in northeastern China. Minoru Nakagawa, an official of the Agriculture, Forestry and Fisheries Ministry, signed the accord on behalf of the Japanese Government. Based on the agreement, the Japanese Government is expected to send a delegation to China this summer to embark on the survey. The two nations reached a basic agreement on the joint development of the Sanjiang Plains in Heilongjiang Province as a major agricultural-producing center at the first ministerial-level meeting in December last year. [Text] [Tokyo KYODO in English 0133 GMT 7 Jul 81 OW]

CSO: 4020/226

BRIEFS

FLOOD PREVENTION CIRCULAR--The Gansu Provincial People's Government recently issued an emergency circular urging localities to eradicate the thinking of being careless and leaving things to chance and to do a good job in flood prevention work this year. Scientific experts concerned have forecast floods along the Changjiang and Huanghe rivers this year. Flood-prone area along the Huanghe River should do everything possible to prevent floods. The circular urges localities to enact flood-prevention measures in a down-to-earth manner. Postal communications, transportation, material supply and supply and marketing departments should support this work. [SK050852 Lanzhou Gansu Provincial Service in Mandarin 1125 GMT 4 Jul 81 SK]

CSO: 4007/521

EXPANSION OF HYBRID RICE AREA CONTINUES TO BE PUSHED

Zhanjiang Prefectures Enlarge Area

Guangzhou NANFANG RIBAO in Chinese 17 Jun 81 p 1

[Article by Reporter Xiao Lan [2556 5663]

[Text] Cadres at all echelons in Zhanjiang Prefecture are using great enthusiasm to promote hybrid rice. A look at current reports from all counties shows a new breakthrough in the offing in the area planted to hybrid rice for the late crop this year, and if nothing unforeseen happens, the area planted will be more than 2 million mu, about one-third the total late crop rice area.

Hybrid rice was first planted in Zhanjiang Prefecture in 1976 when each of the counties conducted experiments. However, since seed production was then not yet up to standard; experiences lacking in open field planting; and yields not sufficiently ideal, some places became leery, wavered, or became apathetic. Nevertheless, a substantial number of other places persevered in experiments, performing a fine demonstrative role. In 1980, the enthusiasm for planting hybrid rice swelled again in numerous counties and communes, and won many successes. From the prefecture's 146,000 mu of early crop hybrid rice, yields averaged 825 jin per mu, an almost 300 jin per mu improvement over conventional varieties. More than 307,000 mu of late crop averaged yields of 806 jin per mu, while conventional varieties, which were unable to withstand natural disasters, suffered a general decrease in yields, yields averaging only 460 jin per mu, a difference of more than 340 jin. In the two counties of Gaozhou and Huazhou, where the area planted to hybrid rice is fairly large, despite the decline in yields of conventional varieties, thanks to the augmentation of yields that hybrid rice provided, the 1980 late crop showed fairly substantial increases in output.

Experience has shown that hybrid rice is a very good variety possessing numerous excellent qualities, the most notable of which are: First, strong adaptability. It may be planted in mountain regions, on plains, along the seacoast, and on hills, or in fertile fields or infertile soils, all of which are suitable. Second, its bumper yield properties are strong, and it can be used to achieve early ripening, high yields, and superior quality. Yields per unit of area are between 100 and 200, or even 300 to 400 jin per mu greater than for conventional varieties. Data gathered since the founding of the Chinese People's Republic show that for every 100 jin per mu increase in rice yields in Zhanjiang Prefecture, 8 to 10 years

would be required for conventional varieties, when only 1 year would be required for hybrid rice. Quality of "Shanyou Liu" is also very good, and the masses like it very much. Third is strong resistance. Ability to withstand diseases, insect pests, and other natural disasters is stronger than for conventional varieties. Inasmuch as hybrid rice is characterized by these "three stronges," Zhanjiang Prefecture has decided to use it as a major method for developing grain production, for promoting readjustment of the crop pattern, for advancing reforms in the internal economic crop structure, and for making a prosperous commodity economy. For this year's early crop, the entire prefecture has transplanted 750,000 mu of hybrid rice, which is now growing very well. Last fall, the six counties of Gaozhou, Huazhou, Xinyi, Dianbai, Suixi, and Maoming assembled more than 3,300 people to go to Ya County on Hainan Island to run more than 15,000 mu of seed production fields. After half a year's effort, they produced more than 3.6 million jin of seeds. Yields averaged 238 jin per mu, more than 40 jin more than the yields per mu of seed production fields during the same period last year, and more than double the yields per mu prior to 1979. Figuring 2 jin of seeds per mu, using the seeds produced on Hainan alone it would be possible to plant about 1.8 million mu. Meanwhile, numerous counties propagated seeds in their own counties on a seed propagation acreage amounting to 25,000 mu. Not only will the seeds propagated in the prefecture satisfy the prefecture's needs for this year's late crop, but some may be supplied to other prefectures. By the first 10 days of May, hybrid rice seeds had already been apportioned to each county and commune. Simultaneous with doing a good job of seed production, most counties have conducted technical training, the prefecture having trained more than 100,000 people.

Endorsement of Area Expansion

Guangzhou NANFANG RIBAO in Chinese 17 Jun 81 p 1

[Article by Commentor]

[Text] The hybrid rice that the scientists and technicians of the country have bred is a "gem of the realm." Recently the state conferred a special award for invention upon hybrid rice breeders. We must give a high degree of serious attention to this major invention, and we must use a high degree of enthusiasm to spread hybrid rice over a larger area of land by way of providing fine conditions for increasing both yields per unit of area and total output of rice.

Development of agriculture requires reliance on policies and reliance on science. Promotion of hybrid rice is application of major accomplishments of agricultural science. Test planting of hybrid rice began in Guangdong Province in 1975, and by 1980 it had progressed to 2.2 million mu throughout the province. Over a 5-year period, a total of more than 9.2 million mu had been planted. This newspaper has reported many times in the past how Shaoguan Prefecture, located in the northern part of the province, promoted hybrid rice during the past several years to achieve remarkable results. Now we have happily noted that promotion of hybrid rice in Zhanjiang Prefecture, located in the southwest part of the province, has also achieved very great results. A hybrid rice area of more than 2 million mu is predicted for the prefecture this year. A look at the situation of promotional work in all counties shows the zeal to be very great, their measures solid, and much hope in being. We wish them success in advance, and hope that each jurisdiction will take further action, and through the adaptation of general methods to local situations, do a good job of demonstrating and promoting hybrid rice.

Experience in production of numerous prefectures in Guangdong Province during the past several years has already demonstrated that hybrid rice possess superiority in a developed root system, vigorous growth, large panicles with many grains, high yields, and good quality. It provides a way not only to increase rice yields per unit of area and total grain output, but also is advantageous for rational readjustment of internal agricultural production patterns, and for all around development of agriculture, and for making the commodity economy of the society prosper. The cadres and masses in quite a few places say, "For a bumper harvest from rice, plant hybrid." In Guangdong Province, hybrid rice is now facing a situation of great development. The problem now is for leaders everywhere to further emancipate their minds, summarize experiences, accurately gauge the role of hybrid rice in increasing output, while at the same time resolving in a down to earth manner some ideological problems and practical problems, so that in places where conditions permit the spread of hybrid rice it will be gradually spread. In some places in the past, because the combinations of varieties were not ideal, and because of twists and turns in test planting by hybrid rice, the enthusiasm of the masses was impaired. We want to explain to everyone here that after several years of experiments and exploration, Shanyou and Weiyu combinations, which are suited to natural conditions in Guangdong Province and which have quite good characteristics, may be gradually freely promoted. Comrades in some places suppose that hybrid rice "seed production is difficult, and there is no way to spread it over wide areas." The facts have proven that with diligent effort, leaders, technicians, and the masses learning through experience the problem of "seed production difficulty" can also be solved. Seed propagation and production on more than 15,000 mu in Zhanjiang Prefecture this spring produced yields averaging 238 jin per mu. Doesn't this very well solve the problem of seeds required for large area promotion of hybrid rice?

Guangdong province has now established everywhere various forms of a system of responsibility for production, and the enthusiasm of the broad masses of commune members for scientific farming is unprecedentedly high. This is extremely favorable for promotion of hybrid rice. All that is needed is for leaders at all levels to be adept at adroitly guiding action to suit the circumstances, do good ideological work, and organizational work to further arouse the initiative of the masses, and greater achievements are bound to be made in the work of promoting hybrid rice in Guangdong Province.

9432

CSO: 4007/468

BRIEFS

LIVESTOCK BREEDING--Urbanites in Heilongjiang Province have begun raising livestock as a sideline occupation. In 1980 there were 13,700 households in Harbin, Qiqihar, Hegang and Jiamusi municipalities raising chickens as their main occupation. According to statistics, they had 910,000 chickens and sold 11.68 million jin of eggs in 1980. Households specializing in raising chickens number 19,100, many impoverished families have become prosperous thanks to chicken raising, which is supported and promoted by many new chicken raising service centers run by municipalities. [Harbin Heilongjiang Provincial Service in Mandarin 2200 GMT 18 Jul 81 SK]

INDUSTRIAL CROPS--Harbin, 14 Jul (XINHUA)--Heilongjiang Province has vigorously developed production of industrial crops. The area sown to industrial crops such as beets, flax, sunflowers and tobacco in the province increased from 6.07 million mu in 1979 to 10.24 million mu in 1980, and again increased by 15.6 percent in 1981. [OW200313 Beijing XINHUA Domestic Service in Chinese 0057 GMT 14 Jul 81 OW]

CHICKEN RAISING--Beijing 27 Jun (XINHUA)--Commune members in the suburbs of Harbin, Qiqihar, Jiamusi and Hegang, Heilongjiang, have rapidly developed chicken raising as a family sideline. In 1980 there were some 13,700 households raising a total of 910,000 chickens, selling a total of 11.68 million jin of fresh eggs to the state. The number of chicken-raising households has increased to 19,100. It is estimated that the total number of chickens raised will reach 1.3 million head by the end of 1981. [OW110616 Beijing XINHUA Domestic Service in Chinese 0700 GMT 27 Jun 81 OW]

FOODSTUFFS INDUSTRY ACHIEVEMENTS--Heilongjiang Province has scored marked achievements in the foodstuffs industry since the PRC's founding. The 1980 total output value of the foodstuffs industry increased 25 percent over 1978, and that of the first 5 months of 1981 increased 58.5 percent over the corresponding 1980 period. The 1980 output of sugar, dairy products, beer and white wine increased from 36 to 60 percent over 1978, and that of the first 5 months of 1981 increased from 30 to 200 percent over the corresponding 1980 period. In 1980 the province provided other provinces and municipalities with 145,000 tons of sugar, 3,000 tons of dairy products and 40,000 boxes of cigarettes. To develop the foodstuffs industry, the provincial departments concerned have allocated 170 million yuan in 1981 to expand production of sugar, dairy products, white wine, beer, cigarettes and sweetmeats. [SK132155 Harbin Heilongjiang Provincial Service in Mandarin 1100 GMT 12 Jul 81 SK]

FLOOD PREVENTION--The Heilongjiang Provincial CCP Committee and the people's government sponsored a telephone conference 14 July to urge various localities to strengthen their leadership over the work to prevent flooding and further do a good job in this regard. Jang Caoli, deputy governor, presided over the conference and Wang Luming, deputy secretary of the provincial CCP committee and chief director of the provincial flood-prevention headquarters, addressed the conference. To cope with the possible heavy rainfall in mid-July, the conference stressed the following tasks: 1) it is necessary to establish or improve responsibility systems for leaders in charge of flood-prevention work; 2) it is necessary to work quickly in repairing flood-prevention and drainage equipment; 3) it is necessary to earnestly maintain appropriate water levels at various reservoirs so as to ensure safety when flooding occurs; 4) a good job should be done in preparing well for mountain torrents; and 5) it is necessary to well organize all trades and industries to actively support the struggle against the floods. [Harbin Heilongjiang Provincial Service in Mandarin 2200 GMT 15 Jul 81 SK]

FLOOD SITUATION--Over the past few days the water level of the Songhua River through Harbin Municipality has risen greatly and abruptly. The water level on 14 July surpassed that of the same flood-stricken 1975 period by 1.6 meters. According to statistics compiled over the last 2 days, the water level has risen 10 cm daily. Farmland around the upper reaches of the river has been inundated. Under this critical situation, Harbin Municipality has mobilized all forces in various social circles to work speedily in repairing all flood-prevention equipment and adopting remedial measures to combat the flood. The Harbin Municipal CCP Committee also convened a Standing Committee meeting 14 July which ran until 2240 hours to discuss ways to prevent or combat the flood. [Harbin Heilongjiang Provincial Service in Mandarin 2200 GMT 15 Jul 81 SK]

ANIMAL FEED PLANT--Beijing, 11 Jul (XINHUA)--The Shanghai Institute of Organic Chemistry is helping build a pilot plant in Bayan County, Heilongjiang Province, that will manufacture animal feed from petroleum. The plant, with an annual capacity of 1,500 tons of feed, will extract paraffin from petroleum produced at the nearby Daqing oilfield, the largest in China. The paraffin will be fermented and a single-cell protein extracted. The protein will be used to feed Bayan County's minkeries, a traditional product of the area. A scientist of the Chemistry Department of the Academy of Sciences said, "This is a new attempt for an institute to help a locality build a pilot plant for the commercialization of the results of scientific research." The chemistry institute, a division of the Chinese Academy of Sciences, began research into the technology in the early 1970s. The pilot plant is expected to be accomplished in early 1982 and efforts will be made to cut the price to within the payment ability of the peasants. [Beijing XINHUA in English 0223 GMT 11 Jul 81 OW]

CSO: 4020/226

BRIEFS

FORESTRY CONFERENCE--The Jiangxi Provincial People's Government recently held a forestry conference in Nanchang. The conference studied the decision of the CCP Central Committee and the State Council on forest protection and forestry development and discussed plans to develop forestry in the province. More than 500 people, including responsible persons of various prefectural, municipal and county party committee and people's governments, forestry and land reclamation bureaus, lumber companies, state forests and reclamation farms and other departments concerned, attended the conference. Responsible comrades of the provincial party committee, the provincial people's congress Standing Committee and the provincial people's government, Fu Yutian, (Liu Donghou), Wang Zhaorong, Xu Qin, Zhang Yuqing, Zhang Guozhen and Li Shizhang, attended the conference. [Nanchang Jiangxi Provincial Service in Mandarin 1100 GMT 14 Jul 81 OW]

CSO: 4007/521

BRIEFS

PEASANT INCOME--Dalian, 14 Jul (XINHUA)--Peasants in the suburbs of Dalian, a major industrial city and seaport in northeast China, had an average per capita income of 365.7 yuan in 1980, nearly double the 1976 figure, according to the municipal statistical bureau. A spokesman for the bureau said the income of every working peasant in the countryside averaged 812 yuan, only 7 per cent less than that of a city worker in Dalian--871 yuan annually. The spokesman said the peasants get their income from three main sources: the collective economy, subsidiary commune-run industries and household sideline production. Income from the collective in 1980 averaged 164 yuan, nearly double the 1976 figure. The bureau spokesman said this was an unusually high growth rate. The spokesman said that 180,000 peasants in Dalian are working in commune and brigade-run enterprises with an annual output value of more than 520 million yuan. These industries now occupy a decisive position in the rural economy, he added. [OW141105 Beijing XINHUA in English 0716 GMT 14 Jul 81 OW]

CSO: 4020/226

BRIEFS

HUANGYUAN COUNTY HAIL--Huangyuan County, Qinghai Province, was hit by hailstorms 26 and 28 June. Crops on some 70,000 mu of farmland were affected. Some 20,000 mu of crops were destroyed. Cadres and the masses in the stricken areas are cooperating and replanting crops and applying fertilizer. The county material supply and financial departments are organizing to aid the work. [Xining Qinghai Provincial Service in Mandarin 1100 GMT 4 Jul 81 SK]

DROUGHT MEETING--The Qinghai Provincial People's Government sponsored a meeting on 30 June to hear the reports on the drought situation prevailing in Haidong Prefecture and enact ways to combat the drought and to help the people overcome this calamity. According to reports, since late June Haidong Prefecture has not had any rain. The situation in Ledu and other counties is even more serious. Most crops in these counties are withering. Over 40 percent of the prefecture are plagued by the drought. To cope with this situation, the provincial civil affairs bureau has appropriated 200,000 yuan. Leading personnel at all levels have actively joined in the operation and taken the lead in the work. [SKD40605 Xining Qinghai Provincial Service in Mandarin 1100 GMT 3 Jul 81 SK]

HAIYAN COUNTY FLOODS--Rainstorms wrought havoc in Haiyan County, Qinghai Province, on the evening of 11 July. Between 2100 and 2300, 52 mm of precipitation fell in the county. The county grain warehouse was submerged, and over 50,000 jin of flour were washed away. Over 50 houses collapsed. It is estimated that the flood cost 200,000 yuan in damage. Deputy governor Ga Bu-long went to Haiyan County on 13 July to inspect the flood situation. [SK142238 Xining Qinghai Provincial Service in Mandarin 1100 GMT 13 Jul 81 SK]

CSO: 4007/521

SHELTER FOREST ACCOMPLISHMENTS, PLANS OUTLINED

Beijing ZHONGGUO LINYE [FORESTRY IN CHINA] in Chinese No 4, 3 Apr 81 pp 6-8

[Article by Bai Jinian (4101 4764 1628) Lieutenant Governor of Shaanxi Province: "Build Well the Shaanxi Shelter Forest System"]

[Text] Building of the "three norths" shelter forest system is a great and arduous undertaking for the creation of prosperity for posterity. The Shaanxi Province population within the area of the shelter forest system numbers 9.6 million, which is 40 percent of the total agricultural population of the country. The area involved is nearly half the total area of the province. Of the total area, 40.49 million mu is an area of windblown sand, and 104.89 million mu is an area of severe erosion. Reckless cutting of timber, indiscriminate clearing of land for agriculture, and excessive grazing for a long period of time over such a vast area has ruined the ecological balance, deteriorated climatic conditions, and caused increasing calamities. The almost 800 million tons of silt annually carried into the Yellow River amounts to half the annual quantity of silt carried by the Yellow River basin. Reality has taught us that unless northern Shaanxi and the area north of the Wei River are quickly afforested, the ecological balance restored, erosion controlled, and the conditions of life improved, any thoughts the people may have about leading prosperous lives will be impossible.

The broad masses of cadres and masses in the loess highland area of Shaanxi Province have an ardent desire to plant trees for afforestation and to change their poverty stricken circumstances. In the 2 years since the CCP Central Committee and the State Council issued a call for the building of the "three norths" shelter forest belt, 46 counties (and municipalities) with shelter forest construction duties have built 4.41 million mu of forests in a 31 percent overfulfillment of afforestation plans. Seedlings have been grown on 400,000 mu, and 135.85 million individual trees have been planted in the four besides (beside houses, villages, roads, and water). In most places the survival rate for newly planted forests is 76 percent. In the processing of building forests, advanced representative experiences have occurred in some counties, brigades, and communes. Chunhua County located in the loess highland prefecture of Gouhe was formerly an area where "the mountains were bald; rocks protruded from hillside gullies, small rainfalls cascaded down entire slopes; large rainfalls choked the ditches; and 9 out of 10 harvests were meager." Annually 4 million tons of silt was eroded from its 1.45 million mu of land. Grain yields from its 580,000 mu of cultivated land were only slightly more than 100 jin. Since 1974, when the County CCP Committee resolved to lead the people of the entire county in massive planting of trees for

afforestation, an accumulated 270,000 mu of water and soil conservation forests have been built, and the forest cover rate has risen from 5.5 percent to 16.8 percent. This, plus capital construction projects for farmlands, has reduced the county's soil erosion by 46.2 percent. Yulin County, located on the southern fringe of the Maowusu desert, formerly sustained severe damage from windblown sand, and many fine fields and hamlets had been buried. After Liberation, the people in this sandy zone began to build forests to control the sand, and since the large scale afforestation of 1970, in particular, a forest conservation area of 1.62 million mu has been built. In the sand zone's more than 400,000 mu of farmland and grassland, more than 7,200 li of shelter forest belts for farmlands have been built, with more than 17 million trees of different kinds being planted. A survey done by the Mangkeng Production Brigade shows a 49.5 percent drop in wind velocity within the shelter belt protection zone, and a 2.4°C rise in temperature. The additional soil improvements and water control for a change in the conditions of agricultural production brought increases in total grain production from 1970's 66.18 million jin to 1978's more than 146 million jin. These representative experiences merit study and spread everywhere.

Fulfillment of Shelter Forest Tasks While Maintaining Quality and Quantity

On the basis of Central Committee requirements and the northern Shaanxi production and construction program decided on by Shaanxi Province, a 5.72 million mu afforestation quota still exists in the building of Shaanxi Province's shelter forest system. This requires our all around planning, strengthening of leadership, and adoption of vigorous measures for quality and quantity fulfillment.

(1) Taking in hand the implementation of plans and organization to carry out tasks. According to the overall-plan, afforestation plans must dovetail with all around development plans and comprehensive handling of soil and water conservation in agriculture, forestry, and animal husbandry. All prefectures and counties (or municipalities) must adapt general methods to local situations in the formulation of their own long range afforestation plans and year by year construction plans. They must maintain a combination of trees, bushes and grass and bushes coming first. In shelter forests, they must adhere to a combination of timber forests and economic forests, using deficiencies to foster strengths. They must adhere to a combination of biological measures and engineering measures, with biological measures being paramount. Selection of varieties of trees to be used in afforestation and afforestation methods requires adaptation of general methods to local circumstances, acting realistically, and selection of the best. We plan initially to build the 10 counties and municipalities of Chunhua, Yulin, Changwu, Jingbian, Yanan municipality, Qingjian, Jiaxian, Baishui, Fengxiang, and Wuyi into advanced shelter forest counties so that they can play a leading and demonstration role in the building of shelter forests.

Planting of seedlings must precede afforestation. In accordance with overall afforestation planning and year-by-year planning, forest tree seeds must be allocated in advance, and arrangements made for carry out seedling propagation tasks. Every echelon of leadership and every forestry unit should take in hand seedling propagation work with even greater zeal than afforestation. State forest farms and commune and brigade forest farms should make an important personal task the propagation of seedlings. Every county shall give attention to a central nursery and a group of mainstay nurseries.

(3) Adherence to both afforestation and care in an effort to increase quality of afforestation. There is need for a decisive change in afforestation as a passing fancy following which no one cares in a situation of much planting but little survival. A system of responsibility for forestry production is necessary, and everything from the design for construction to nurture and care should be given careful attention to assure planting and survival. Strengthen forest tree protection and management work; establish a system of personal responsibility for protection of forests, and formulate sensible methods of providing remuneration and care. Formulate effective management methods of closing mountains to allow forests to grow, and closing sands to allow grass to grow to prevent damage by people and livestock, so that they will grow healthy and strong, and grow into forests.

(4) Diligently carry out the urgent notice from the State Council, and earnestly protect existing forest vegetation cover. In the key counties of shelter forest construction in Shaanxi Province, trees are few and forest vegetation cover is precious, requiring adoption of resolute measures to forcibly stop the evil tendency of destruction of forests and reclamation of wasteland, or reckless cutting and denudation. A good job of fire prevention for the protection of forests should be instituted to halt forest fires, with awards given those who perform meritorious deeds in protecting forests, and punishments given those who destroy forests. Cases of serious damage to forests, and criminal elements shall be severely punished in accordance with the law.

Put Forestry Policies Into Effect To Arouse the Enthusiasm of the Masses.

Fulfillment of the task of building shelter forests requires adherence to carrying out the spirit of the Central Committee's and the State Council's "On Vigorous Development of the Instruction on Afforestation," and determined reliance principally on communes and brigades for afforestation, active development of state farm afforestation, and encouragement to individual commune members to plant trees, to achieve participation in forestry by the state, collectives and individuals, using policies to arouse the enthusiasm of the masses.

(1) Barren mountains and sandy wastes that the state cannot plant within a short period of time may be distributed for afforestation to communes and brigades lacking land to afforest. Rights to these lands shall remain unchanged; there will be no limit to area, and ownership goes to whomever does the afforestation. The state and communes may also build forests cooperatively, with the rights to the forests belonging to both and benefits being proportionately divided. In accordance with the spirit of documents drawn up by the Provincial CCP Committee, a portion of barren mountains belonging to the collective may be turned over to commune member households for afforestation, and a forest rights certificate issued to them by the County People's Government to remain in effect and unchanged for a long period of time. When land designated for afforestation by the collective or by individual commune members is not afforested within the time limit, it shall be taken back. Clearing of land for farming, digging up sod, burning of dung, and such activities unrelated to forestry production in afforested areas shall result in criticism and indoctrination of light offenders and handling in accordance with the law of serious offenders. In a small number of places where the collectively owned barren mountain area is large and cannot be reforested in a short period of time, cooperative state-commune afforestation may also be done, or else cooperative afforestation with some other communes and brigades may be undertaken.

(2) Afforestation along railroad right of ways, along trunkline highways, and along streams and warehouse areas will be done either by the units in charge of them or in cooperation with nearby communes and brigades. The units in charge will be responsible for providing funds, and communes and brigades can contract planting, survival, and protection. Thinning or replanting, when required, is to be done through consultation of both parties, with a plan of action being drawn up and reported to the county forestry authorities for approval. Timber resulting from thinning out or replanting will be proportionately shared. Prunings, and cuttings as well as collection of fruit will be entirely the preserve of communes and brigades. Forest trees planted by units in charge may be entrusted to communes and brigades for care and protection. Contracts may be drawn up clearly setting forth rights, benefits, and duties to be diligently carried out.

(3) Scattered small tracts of forests owned by the state may be entrusted to nearby communes and brigades for administration and management, and contracts drawn up clearly setting forth the duties, rights, and benefits of both parties. In forests under their management, communes and brigades may collect seeds, cut firewood, and operate sideline occupations. Following authorization, those who provide good care may thin out a small amount of timber for their own use. Those who do not take good care of the forests or even violate contract provisions shall be criticized and subjected to indoctrination in light cases, and have the contract abrogated in serious cases, pay indemnities for losses, or be punished in accordance with law.

(4) In the case of large areas of natural forests, all designation of forest rights made in accordance with pertinent policy provisions of the central government, regions, and provinces, shall remain unchanged in any way when checking shows the area and boundaries in general conformity and the boundaries substantially clear. In cases where trees belonging to the masses are taken away in the name of cutting off the tail of capitalism, proper handling will be done in accordance with policies. Cases of dispute involving rights to trees or forest rights, will be solved by the prefectures and counties where they are located. Cases that straddle areas shall be cooperatively decided by provincial forestry and civil government units. Until such time as forest rights have been decided, the status quo must be maintained, and no party may, on any pretext whatsoever, recklessly cut down trees or denude forests. Violators will be severely dealt with.

Strengthening of Scientific and Technological Work To Increase Quality of Afforestation.

Between Liberation and 1975, the accumulated afforested area within the shelter forest construction area of Shaanxi Province has been 24.68 million mu, and a reserve area of 7.03 million mu, but the survival and preservation rate has been only 28.5 percent. Reasons for the low survival and preservation rate are diverse, but one major reason has been lack of scientific afforestation and scientific management. Some places violated the principles of adapting general methods to local situations and planting trees suited to the place. They did not conscientiously plant in accordance with technical requirements, with the result that they got only half the results from twice the effort. Therefore, concern for science is very necessary in afforestation. In these areas today, there are 27 prefecture and county forestry institute units and more than 120 technicians who must link production realities and strengthen scientific research work. The Provincial Forestry Institute must emphasize research applicable to forestry, and gradually

form a special research center. Prefecture and municipal research institutes should conduct specialized research that takes account of forestry building characteristics in their own local areas. County research institutes are responsible largely for promotion of advanced experiences and new techniques, and for leading the masses in the development of scientific experiments. Provincial, prefecture, and county research forces should be organized in a united way and work divided for cooperative efforts in breeding of forest tree varieties, and research on afforestation techniques and techniques for the prevention and control of major diseases and insect pests, efforts being directed to earliest possible success and application to production. Full use must be made of forestry work stations, and work in the spread of forestry techniques vigorously launched with basic knowledge, new techniques, and new experiences in the building of shelter forests being propagandized and disseminated to the masses.

Sowing of seeds by aircraft for afforestation and planting of grass can be done quickly and at low cost. This is a good way to accelerate greening. The speed of afforestation and planting of grass using aircraft must be accelerated in northern Shaanxi. Also necessary is serious attention to the establishment of seed bases to solve problems in seed used for airborne sowing. Prefectures and counties concerned should actively do a good job, particularly in strengthening of management over sown areas, to strictly prohibit people or livestock from trampling and destroying them, promoting survival to become forests.

In order to provide trained personnel for construction of the "three norths" shelter forest, the Yan'an and Yulin Forestry Schools will conscientiously operate and do a good job of technical training of cadres, giving rotational training to all cadres on the job within a period of from 3 to 5 years. In order to arouse the initiative of technicians, leaders should show concern for them, and earnestly help them solve real difficulties and problems in their work, their study, and their livelihoods. They should give serious attention to professional titles and promotions of technicians, breaking the rules to promote those who show outstanding technical achievements. Technicians possessed of practical experience, organizational ability, and who are in the prime of life should be elevated to leadership positions. Those whose technical skills are unsuitable should be set straight, and those who change profession should be returned to their units.

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CSO: 4007/465

BRIEFS

EDIBLE OIL SALE--Urumqi, 12 Jul (XINHUA)--Food departments in Xinjiang have recently decided to sell 5 million jin of sunflower seed and rapeseed oil to urban and township residents below the negotiated price. This is possible because of an increase in the oil-bearing crops output 2 years in a row. Xinjiang produced a total of 125.97 million jin of cotton seed oil in 1980. [Beijing XINHUA Domestic Service in Chinese 0048 GMT 12 Jul 81 OW]

CSO: 4007/521

GREATLY INCREASED YIELDS ATTRIBUTED LARGELY TO HYBRID RICE

Hangzhou ZHEJIANG RIBAO in Chinese 20 Jun 81 p 1

[Article: "Hybrid Rice Has Changed the Long Time Situation of Low Late Rice Crop Yields in Zhejiang Province; Six Years of Accumulated increased Output, 1.75 Billion Jin; Area Planted This Year of 9 Million Mu, Half the Late Crop"]

[Text] The correspondent obtained the following yesterday from the Provincial Department of Agriculture. This year's sowing of hybrid rice in Hangzhou Province is now under way, the planted area amounting to more than 9 million mu. This is the largest area to be planted to hybrid rice since it was first promoted in Zhejiang Province in 1975.

Zhejiang Province's accumulated area planted to hybrid rice amounts to more than 17,493,000 mu, and hybrid rice has shown itself to be greatly superior whether planted in north or south Zhejiang. It has been calculated that over a 6-year period increased yields from hybrid rice, as compared with conventional late crop rice, have been about 1.75 billion jin, which is the equivalent of double the total annual grain output last year of Jiaxing City, which provided the greatest amount of commodity grain in the province.

Making the most of hybrid superiority was not only welcomed by rural grassroots level cadres and commune members, but has also aroused the serious attention of leaders at all echelons throughout the province, prefectures, and counties. The province set up a special hybrid rice production office for regular summarization and exchanges of experiences, and to promote hybrid rice. The Provincial People's Government also specially allocated more than 7 million yuan, more than 64,000 tons of chemical fertilizer, and other materials for active support to promotion of hybrid rice. All echelons of leadership entered into echelon by echelon training of technical mainstay cadres, and operation of experimental fields and bumper yield plots to take the initiative in the promotion of techniques. As a result, the area planted to hybrid rice rapidly expanded. In 1975, only 15 mu in the entire province was test planted, but by 1980 this had expanded to 8.399 million mu, one-tenth the total area planted to hybrid in the country, or about 42 percent of the area of Zhejiang Province's late rice crop. In the southern and central prefectures of Wenzhou, Taizhou, Lishui, and Jinhua, hybrid rice already holds a commanding position in late crop rice production.

The promotion over wide areas of hybrid rice has changed Zhejiang's long time late rice crop low output situation, and has opened a new path toward increasing total annual grain output. The late rice crop season is the one when the area planted to grain crops is annually greatest in Zhejiang Province. It accounts for about 40 percent of the annually multiply cropped grain growing area and the total annual output of grain. However, because of the urgency of the late crop season, the frequency of natural disasters, and the lack of high yield superior varieties of broad adaptability, in the 28 years between the founding of the Chinese People's Republic and the promotion of hybrid rice varieties, the province's late rice crop output never averaged more than 500 jin per mu, more than 100 jin less than from the early rice crop. Following promotion of hybrid rice over large areas, plus other supplementary measures to increase output, output from the late rice crop increased strikingly. In 1979, yields from the province's late rice crop averaged 642 jin per mu, the first year to break 600 jin. In 1979, the hybrid area for the late crop in Huangyan County and Wenzhou City amounted to 62 and 71.2 percent respectively of the total late rice crop area, and late rice crop yields averaged 928.3 and 817.3 jin per mu respectively. The masses said happily, "When hybrid rice was planted, the late crop was better than the early crop." Promotion of hybrid rice caused grain output to catch up in some low output places. In 1977, average grain yields were less than 900 jin per mu in 15 mountain counties including Chunan, Xinchang, Tiantai, Longquan, Jiangshan, Qingtian, and Taishun, and in four of the counties they were less than 800 jin. In 1979, wide area plantings of hybrid rice, plus other measures to increase yields, suddenly increased average yields of grain in these 15 counties to 1,031 jin per mu, and their annual output of grain increased by 200 million jin, the portion from increased yields of hybrid rice amounting to 74 percent of the total increase in output. Moreover, total output from the late rice crop in mountain counties of Changshan, Jiangshan, Jinyun, and Slichang was double that of 1976.

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CSO: 4007/516

COMMUNE INDUSTRY OUTPUT VALUE REPORTEDLY UP

Hangzhou ZHEJIANG RIBAO in Chinese 13 Apr 81 p 1

[Article by Wealth Computation Department, Provincial Commune and Brigade Enterprises Administration: "Striking Growth in Zhejiang Province Commune and Brigade Industry Gross Output Value During First Quarter; Gross Output Value Reaches More Than 890 Million Yuan, a 61 Percent Increase Over the Same Period Last Year; Distribution and Product Mix of Readjusted Enterprises Linked To Restructured Enterprise Management"]

[Text] Diligent implementation this year by commune and brigade enterprises in Zhejiang Province of the CCP Central Committee's programs for readjustment of the national economy, with emphasis on converting the output of some enterprises and restructuring enterprise management has brought about healthy growth of commune and brigade enterprises during the course of readjustment. First quarter gross output value to commune and brigade industries throughout the province reached 891,980,000 yuan, a 61 percent increase over the same period last year.

By way of thoroughly implementing readjustment programs, comrades attending the conference of bureau managers of provincial commune and brigade management bureaus, held early this year, studied the spirit of the Central Committee work conference relating it to work realities in commune and brigade enterprises, and purging effects of "leftist" mentality. Following the conference, leaders of units in charge of commune and brigade enterprises at all echelons in the province, prefectures (or municipalities), and counties went down to grassroots levels to investigate and study, to probe the real situation and arrange priorities, to differentiate trades and industries, to categorize, and to make determined readjustment and restructuring of enterprises in some industries where there is blind development, duplicative building of plants, or chaos in management. Comrades in charge at the Provincial Commune and Brigade Enterprise Management Bureau took an investigation team to Ningbo and Jinhua prefectures to help prefectures and counties with their readjustment work. Leaders of the Hangzhou Municipal Commune and Brigade Enterprise Administration worked together over a 2 month period with a group of commune, brigade, and grassroots level cadres in Xiaoshan, Chunan, and Fuyang counties to probe and arrange in order of importance problems in enterprises in five major industries, namely light textiles and knitting, machinery and metals, construction materials, processing of agricultural byproducts, and service trades and transportation. After clarifying problems, they decided to

gradually carry out mergers, conversions, or restructuring of about 20 percent of the enterprises. First quarter gross industrial output value for the prefecture increased 64 percent over the same period last year.

In the process of readjustment of commune and brigade enterprises, all areas further strengthened market forecasting, and strove to use accurate market forecasting to turn to advantage the flexibility that characterizes small commune and brigade enterprises. Enterprises in competition for raw materials with large scale advanced industrial enterprises, or for which no raw materials could be assured, and for which markets for products did not exist were rapidly converted to product lines for which raw materials were assured, for which energy consumption was low, and for which there was a need by the state or in the daily lives of the people. Leaders at all echelons and departments in charge in Ningbo and Shaoxing prefectures both gave attention to state fixed point enterprises and production of name brand goods, and also converted some native textile, silk, and brewing enterprises to construction materials, to handicrafts and art, to goods in short supply in the daily life of the people, to edible fungi, and to such farming and processing industries. As a result gross industrial output value for the first quarter reached an all-time high, increasing by 78 percent and 75 percent respectively over the same period last year.

In the process of readjusting commune and brigade enterprises, every jurisdiction closely linked readjustment to restructuring of management of enterprises. Thus, a large number of enterprises tapped latent production potential, and as soon as new products went into production at merged or converted enterprises, a new vitality appeared. When a group of cotton and linen textile enterprises in Cixi County with a former gross output value of more than 30 percent that of the entire county converted production, the enterprises were helped establish and perfect systems of responsibility for production as key links, with restructuring of planning, labor, fiscal, and material management. As a result these enterprises not only converted production rapidly but also converted well. This year's first quarter gross output value for commune and brigade industries throughout the county amounts to 66.83 million yuan, more than double that of the same period last year.

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CSO: 4007/439

SURVEY RESULTS CLAIM INCREASED PEASANT INCOME, GREATER CONSUMPTION

Hangzhou ZHEJIANG RIBAO in Chinese 7 May 81 p 1

[Article by Provincial Statistical Bureau: "Income Increases and Consumption Grows For Most Peasants in Zhejiang Province, a Survey of Family Livelihood in 610 Peasant Households in 17 Counties Shows"]

[Text] Results of a survey of commune family income and expenditures (family livelihood) conducted during January this year by the Zhejiang Provincial Statistical Bureau show the income of most peasants in the province to have increased and consumption to have grown, placing new demands on material and cultural life. In 1980, a year in which agricultural production was afflicted with serious natural calamities, more than one-third of the households in rural villages had spare cash, and a larger number of households had spare grain, powerfully demonstrating the correctness and the force of the series of programs and policies formulated by the CCP Central Committee during the Third Plenary Session of the 11th Party Central Committee.

Targets of this survey were 510 peasant households in 51 communes (brigades, and production teams) in the 17 counties (or municipalities) of Lin'an, Xiaoshan, Chaoshou, Haining, Cixi, Ninghai, Shengxian, Shangyu, Yongjia, Pingyang, Yiwu, Quzhou, Longquan, Jinyun, Huangyan, Shaoju, and Putuo. In 1980, average gross per capita income for these 510 households was 249.70 yuan, which was an 88.60 yuan or 55 percent increase over the 161.10 yuan of 1965, the year for which comparable household livelihood survey data were available. Average per capita net income was 219.20 yuan, an 85.80 yuan or 64.3 percent increase over 1965's 133.40 yuan. Commune member income was characterized as follows: First, income distributed by the collective increased more rapidly than income from household sideline occupations. Each person derived an average income of 141.20 yuan from the collective, a 63.20 yuan or 80.7 percent increase over the 78.10 yuan of 1965. Income derived from household sideline occupations amounted to 62.80 yuan, an 18.10 yuan or 40.6 percent increase over the 44.70 yuan of 1965. Other income was 15.20 yuan, a 4.60 yuan or 43.3 percent increase over the 6.60 yuan of 1965. Second, 32.5 percent of households had per capita net incomes averaging more than 250 yuan. The standard of living of this group of households is currently fairly affluent. Households with per capita net incomes averaging less than 150 yuan amounted to 20.2 percent of the total. For these households, income was less than expenditures and life was still rather hard. Those households in between these

two categories numbered 47.3 percent. In this group, income and expenditures balanced. In plains areas, net per capita income averaged 232 yuan; in hilly regions it was 213.20 yuan; and in mountain areas, it was 202.70 yuan. During 1980, rate of increase of peasant income was greater in mountain regions and in plains areas though absolute figures were still much lower than for plains areas.

A look at the situation of the 510 households surveyed shows an increase in the amount of consumption accompanying increases in commune member income, and the structure of consumption has undergone change too. The proportion spent on food has declined relatively, while the proportion spent on clothing, purchase of things, and housing has increased. At the same time, quality of commune family consumption goods has improved with rapid growth occurring in medium and high quality durable consumer goods. Newly built commune member houses are numerous and living conditions have improved. Among the surveyed households, in 1980 the living area per capita averaged 16.8 square meters.

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ZHEJIANG

BRIEFS

OVERFULFILLMENT OF SPRING GRAIN QUOTAS--As of 5 June, 367 million jin of spring barley, wheat, and broad beans have been requisition purchased in the province for a 6 percent overfulfillment of spring grain requisition procurement quotas. Last year the area sown to spring grain in the province was less than the year before, and both per unit yields and total output were somewhat less than last year. However, given the encouragement of the line, programs, and policies of the 13th Plenary Session, the enthusiasm of the broad masses of peasants was very high, and they sold to the state more than 88 million jin more grain than for the same period last year. While fulfilling requisition procurement plans, grain departments everywhere also acted in accordance with the needs of the peasant masses to actively launch an exchange of rice for spring grain. As of 15 June, 200.51 million jin of spring grain had been taken in exchange, an exchange of 86,190,000 jin more than during the same period last year. In this total was both the procurement amount and the exchanged amount of Erling barley, which is in extreme demand both inside and outside the province as a raw material for beer. This year more than 65 million jin more of it will be stored than last year. [Text] [ZHEJIANG RIBAO in Chinese 21 Jun 81 p 1] 9432

OVERFULFILLMENT OF RAPESEED PROCUREMENT QUOTAS--Rapeseed procurement quotas have been overfulfilled throughout the province. As of 10 June, 345.93 million jin of rapeseed had been purchased in a 123.55 percent fulfillment of procurement plans. More than 31.2 million jin more was purchased than in 1980, the year of maximum procurement, to create an all-time high record for procurement of rapeseed in Zhejiang Province. Right now the broad masses of peasants are still anxiously offering rapeseed for sale to the state. The lines, programs, and policies decided upon by the Third Plenary Session have extremely aroused the enthusiasm of the broad masses of peasants to offer rapeseed for sale. Statistics for the period 1 to 10 June show procurement throughout the province of 269.39 million jin of rapeseeds for an average procurement of almost 27 million jin per day. Both the speed of procurement and the large volume have never before been seen in Zhejiang Province. In order to meet procurement requirements, grain unit cadres on all echelons have gone to the front line to join in procurement, and procurement sites have also been set up, and procurement hours extended as a convenience to the masses in making sales. [Text] [Hangzhou ZHEJIANG RIBAO in Chinese 14 Jun 81 p 1] 9432

RAPeseed INCREASE--Data provided by the provincial meeting to estimate output from spring flowering held in Wenzhou shows that despite climatic conditions this spring unfavorable to growth of rape, an increase of 30 percent rapeseed is expected this year, nevertheless. This marks the fourth consecutive year of bumper rapeseed harvests in Zhejiang Province. It is reported that the more than 3.76 million mu planted to rape in the province last winter represents a more than 800,000 mu expansion over the area of the previous year. Rapeseed yields are expected to reach an average 162 jin per mu, an increase of more than 4 jin over the previous year. Total output is estimated to reach more than 6 million dan, approximately 30 percent more than the previous year. This year's rape production was damaged first by drought and then by freeze, long periods of overcast and rainy weather, and hailstones with high winds. However, as a result of diligent implementation everywhere of the party's economic policies, further establishment and perfection of various systems of a system of responsibility for production, further arousal of mass initiative, selection of superior varieties, and meticulous propagation and care, victory over the various disasters was finally achieved to win a bumper harvest. [Text] [Hangzhou ZHEJIANG RIBAO in Chinese 6 Jun 81 p 1] 9432

HOG PROCUREMENT--Zhejiang overfulfilled the 1981 second quarter hog procurement target by 12 percent. A total of 2.88 million head of hogs were procured by the state. By the end of June, the province has a reserve of 710,000 hogs, an increase of 50,000 over the same period last year. [Hangzhou Zhejiang Provincial Service in Mandarin 1040 GMT 12 Jul 81 OW]

DIVERSIFIED ECONOMY--Zhejiang has achieved good results in developing a diversified economy. The total output value in that field during 1980 amounted to 5.14 billion yuan, or 5.6 times more than 1949. Efforts have also been made in promoting the production of citrus fruit, tea, cotton, mushrooms and cultured pearls and developing animal breeding. [Hangzhou Zhejiang Provincial Service in Mandarin 1040 GMT 12 Jul 81 OW]

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TITLE: "Studies on the 'Cultivating Method According to Leaf Remainder Index' of Winter Wheat"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 2, Apr 81 pp 1-13

TEXT OF ENGLISH ABSTRACT: 1. According to the effects on the development of various organs and the differentiation process of inflorescence by applying nitrogen fertilizer and watering during the emergence of different leaves which develop in spring on the main stem of winter wheat (*Triticum aestivum* L.), it is possible to offer a scientific basis for freely controlling the plant pattern and standardizing the field management.

2. When fertilizer and water are applied during the emergence of leaf n on the main stem, the ultimate size of leaf $n+2$ increases to the greatest extent, and

[Continuation of ZHONGGUO NONGYE KEXUE No 2, Apr 81 pp 1-13]

leaves $n+3$ and $n+1$ also increase greatly, with leaves n , $n+4$ and $n+5$ increasing only slightly. According to the synchronous regulation of various organs, the synchronous organs sheath $n+1$ and internode n with leaf $n+2$ also increase in their size to the greatest extent and the rest exhibit increases accordingly.

3. The "leaf remainder index" method (i.e., the remainder of total leaf number) can be used to identify the differentiation process of inflorescence and it is more apparent and precise than the "leaf number index" method. If N is taken to represent the total leaf number when the leaf N spreads out, the differentiation process of inflorescence is in the tetrad stage; formerly, deduced by the "leaf remainder index" method, anther primordium was formed when the leaf N emerged; primordium of stamens and pistils was formed around the stage at which the leaf $N-1$ emerged; floral differentiation starts while the leaf $N-2$ emerges; the end of the double-ridged stage and the glume differentiation are around the stage of leaf $N-3$ emergence; the spikelet primordium begins to appear when the leaf $N-4$ emerges; single prism stage begins after the leaf $N-5$ is visible, and the stem growing point elongates before or around the stage of leaf $N-6$ emergence, depending on the environmental conditions.

4. During the stage of leaves N and $N-1$ emergence, the application of fertilizer and irrigation will reduce the degeneration of florets, raise the percentage of fructification and increase the weight of the grain per ear. When leaves $N-2$ and $N-3$ are around the stage of emergence, the application of fertilizer and irrigation will elongate the lower internodes, the plants will grow much higher, and the leaves of the upper part will grow much bigger. Thus, it will often lead to

lodging. If fertilizer and water are applied when leaf N-4 appears, the percentage of ears derived from the tillers will increase.

5. According to the above-mentioned rules, we suggest two methods of using the "leaf remainder index" to cultivate high yield winter wheat.

(1) "V" pattern method: The land should be fertile and seedlings sturdy with adequate irrigation before the winter comes. When the plants turn green, the soil should be loosened and the seedlings should be restrained for 40-50 days by restricting fertilization and watering. Then the fertilizer and water should be applied around the time when leaves N-1 or N emerge, and adequate irrigation should follow at the stages of booting, earing and grain filling. This method is suitable for fertile soil and high density colonies.

(2) "W" pattern method: The conditions are the same as described in the "V" pattern method. If the soil fertility is moderate or rather barren, with a thin density colony, the period of restricting fertilizer and watering should be reduced to 20-25 days. The application of fertilizer and irrigation is usually around the time leaf N-4 emerges; then, the growth of seedlings should be restrained again for 20-25 days. Around the stage of emergence of leaves N-1 or N, fertilizer should be applied and water supplied once again. Field management during the later stage are the same as in the "V" method. This is suitable for the growing of winter wheat in common fields.

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TITLE: "The Characteristics of Response to Temperature and Photoperiod by Early Rice Cultivars in Relation to High-yield Culture"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 2, Apr 81 pp 14-21

TEXT OF ENGLISH ABSTRACT: By sowing 17 local early rice cultivars on different dates in Wuhan district, Hubei Province, in 1973-1975, we investigated the effects of temperature, photoperiod and basic vegetative growth duration on them, and made a comparison of the differences of some other important economic characteristics among the early rice cultivars. The main results are as follows:

1. According to the characteristics responding to temperature and photoperiod, early rice cultivars in Hubei Province can be classified into two ecological types: (1) The cultivar of the first type is more sensitive to temperature, but insensitive to short day-length. At present, most cultivars of early rice belong to this type.

(2) The second type responds weakly to temperature, but shows a negative effect (by delaying panicle initiation and flowering) when treated with a short day-length (10 hours). This may be a new ecological type of early rice. According to

our observation, early rice cultivars such as "Zhu-lian-ai," "Wen-ge," "73-354," "2057," "Tie-zhu," "Jian-6," etc., belong to this type.

2. When early rice cultivars are inverted as a second cropping rice, we have observed a newly-formed characteristic that the date of panicle initiation, flowering and maturing of the plants from the "new seeds" sown just after harvesting would apparently be delayed by 3-15 days, as compared with the plants from the "old seeds" harvested the summer before and sown on the same sowing date as the "new seeds." We regard this characteristic as "delayed maturity by sowing newly harvested seeds of early rice."

3. There is a significant difference in the strength of "delayed maturity by sowing newly harvested seeds of early rice" between two ecological types of early rice cultivars. The flowering and maturing date of the plants from newly harvested seeds of the first ecological type was delayed by 12-15 days, while that of the second ecological type was delayed by only 3-5 days.

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TITLE: "The Inheritance of Economic Traits in Early Xian Rice and Its Role in High-yield Breeding"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 2, Apr 81 pp 31-37

TEXT OF ENGLISH ABSTRACT: Experimental results reveal that the heritability of the important economic traits of early xian-type rice express its magnitude in the following decreasing order: grain weight (75.99 - 92.61 percent), spikelets per main panicle (31.81 - 66.44 percent), sterility of main panicle (21.61 - 65.43 percent), grain yield per plant (26.45 - 59.39 percent) and panicles per plant (29.75 - 44.60 percent).

For the three traits which possess higher heritabilities, the F_2 population from crosses between widely different parents show wider segregation, and higher genetic advance could be obtained under a certain selection pressure.

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Through correlation analysis among the traits and between the two transplanting methods, it is suggested that the reasonable selection of parents for crossing, taking larger grain weight and high fertility as the main selective indices and paying attention to the integrated improvement of traits in the single transplanting nursery, appears to be a promising approach to the breeding program for high yield in early xian-type rice.

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TITLE: "A Preliminary Report on the Production of a Spring Wheat Cultivar 'Beijing Red No 1' Monosomic Line"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 2, Apr 81 pp 38-40

TEXT OF ENGLISH ABSTRACT: On the basis of the established monosomic lines of the variety Zhongguo chun [Chinese Spring], a new set of monosomic lines has been developed in the Chinese spring wheat cultivar "Beijing Red No 1." The resulting monosomics were test-crossed in 1979 with respective ditelosomics of Zhongguo chun. As a result, 15 monosomic lines have been proved to be correct, with a karyotype $20'' + t'$. In the line 5D, the telocentric formed a heteromorphic bivalent, showing that there had been a univalent shift. The remaining monosomic lines involving 1A, 6A, 2B, 2D and 3D, due to the lack of respective ditelosomic stocks in 1979, are to be test-crossed and examined in 1981. Some aspects of univalent shift are discussed.

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TITLE: "Xushu 18--A New High-yield Sweet Potato Variety with *Fusarium* Root Rot Resistance"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese No 2, Apr 81 pp 41-45

TEXT OF ENGLISH ABSTRACT: Xushu 18 was released by the Xuchou Regional Agricultural Research Institute in 1972. It was selected from the cross between Xin-da-zi x 52-45 with inbreeding backcross. Through testing, evaluation and propagation it has been shown that this new variety has adapted well to many regions of Jiangsu, Shandong, Henan and Anhui provinces as well as Beijing district, etc. Since 1976 the producing area of Xushu 18 has been expanded to 7 million mu of land (0.47 million hectares).

Among the many growth characteristics of the new variety observed, the high-yield ability and the high resistance to root rot disease caused by *Fusarium solani* (Mart) Sacc, f, sp. batatas Meclure are the vital important factors ensuring normal growth and stable yield.

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Xushu 18 has shown a good performance throughout the growing season. Sprout plants root and establish well, start growing promptly 30-40 days after planting, and grow vigorously. The optimum LAI (leaf area index) exists between 3 and 4, and the tuberous roots bulk and grow rapidly during the effective hot season, 60-90 days after planting. At the approach of late autumn and then by harvest time, this variety continues to grow and bulk steadily. Thus, the yield of Xushu 18 is greater than that of Okinawa 100, the popular cultivar, by 20-30 percent in fresh root weight and over 30 percent in dry root weight.

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TITLE: "Advances in the Study of the Migration of the Brown Planthopper in China"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese
No 2, Apr 81 pp 52-59

TEXT OF ENGLISH ABSTRACT: The paper reviews the chief achievements in our study of the migration of the brown planthopper (Nilaparvata luteipes Stål) during 1977 to 1980. Through observations made during the past few years, the northern boundary of the insect's overwintering site in south China has been determined as well as the range of year-to-year fluctuation. By considering the phenomenon of its simultaneous sudden appearance in wide areas, the developmental stage of ovaries in the females during the process of migration, the data collected by means of aircraft, seacraft and alpine nets, and the data obtained through releasing and recapturing the marked insects, we have discovered that the insect is characterized by long distance migration.

A division of the regions where the insect pest may appear and methods of forecasting its occurrence have been suggested based on a summary of its migratory state, climatic characteristics and rice cropping system in China.

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TITLE: "The Meteorological Index and Mechanism of Chilling Injury at the Blooming Stage of Rice"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese
No 2, Apr 81 pp 60-64

TEXT OF ENGLISH ABSTRACT: The Japanese rice, Norin 46, sensitive to lower temperatures, was used as the test material. The objective of this study is to elucidate the changes in the percentage of empty grain and physiological causes in the formation of abortive grains by chilling at lower temperatures at the blooming stage of rice. The results showed that as the temperature decreased, the proportion of empty grains of the rice plant increased. There was a positive correlation between the number of empty grains and the dysgenesis of the flower glume. The physiological causes of the dysgenesis of glume by chilling injury at the rice's blooming stage were the inhibition of both the germination of pollen grains and the development of the pollen tube as well as the opening of the rice flower. The relationship between the level of chilling injury and the percentage of empty grains depended on the climatic type of chilling. A diurnal maximum temperature of 27°C was the lowest limit of suitable temperatures for anthesis and pollination.

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TITLE: "Theory of Preventing Low Temperature Transpiration Inhibitor and Its
Application"

SOURCE: Beijing ZHONGGUO NONGYE KEXUE [SCIENTIA AGRICULTURA SINICA] in Chinese
No 2, Apr 81 pp 73-79

TEXT OF ENGLISH ABSTRACT: Based on the evaporation theory of the free water surface described in this paper, we have introduced the water transpiration resistance factor of the plant itself and worked out a transpiration formula related to the transpiration intensity of the plant and the meteorological and resistance factors. It has been shown quantitatively that the transpiration intensity varied inversely with the resistance index of the plant, and directly with the temperature-humidity index (T/R) and the leaves-air temperature difference. Using experimental data from many sites, the practical value of the formula has been further proved, thus providing a theoretical basis and measures for inhibiting transpiration and preventing low temperatures (increasing plant temperature).

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